Quarterly news from the
International Union of Marine Insurance

Issue 52 — March 2026

EYE

IUMI

Message
from the President

Knowledge is strongest when shared

Frédéric Denèfle
IUMI President

Marine insurers are operating in a brave new world. An increasingly volatile global political landscape is generating unfamiliar risks, forcing the industry to navigate levels of uncertainty not seen in recent years.

The geopolitical outlook remains opaque. The conflict between Russia and Ukraine shows no clear path to resolution, while hostilities have escalated in the Middle East impacting the Strait of Hormuz and the Persian Gulf. These and other tensions are reshaping risk profiles and adding layers of complexity to the challenges marine insurers must manage.

Yet geopolitics tells only part of the story. Global shipping itself is undergoing a profound transformation.

Despite widespread concerns that tariffs and tax measures would stifle global exchange, international trade has defied expectations. According to a recent report, trade volumes reached an unprecedented USD 35 trillion in 2025. While some countries have experienced sharp disruptions to their national trade balances, the predicted collapse in global trade has not materialised. Instead, commerce has adapted — new trading partnerships have emerged, fresh markets have opened and international exchange has found alternative pathways.

Regulation and sustainability are also reshaping the sector. In October, the IMO postponed the introduction of new greenhouse gas regulations for shipping by one year. Even so, investment in cleaner vessel fuels continues at pace, including dual-fuel technologies utilising LNG and methanol. At the same time, advances in vessel technology are driving down operating costs, improving efficiency and enhancing customer service — demonstrating that commercial performance and environmental responsibility are not mutually exclusive.

Trade continues to expand across regions where nations are collaborating more closely to share economic growth and mutual benefit. ASEAN countries provide a strong example of regional cooperation rooted in a firm belief in international trade as a critical engine of prosperity for all members.

Will these investment trends and the steady growth of global trade endure? The answer remains uncertain. What is clear, however, is the role marine insurers will continue to play. Through their financial strength and technical expertise, they will support and share the risks inherent in global transport and shipping — whatever direction international trade may take.

IUMI stands as a steadfast pillar of support for its members in these challenging times. We are committed to analysing, debating and sharing insights on emerging risks, innovative technologies, shifting geopolitical threats and the many other forces reshaping our industry. Our Asia Forum in Shanghai in May and our Annual Conference in Rotterdam in September will provide key opportunities to exchange knowledge and perspectives. Beyond these events, we remain actively engaged through webinars, podcasts, newsletters, technical papers and the ongoing work of our Technical Committees, Forums, and Working Groups.

We encourage you to take part in these discussions and to contribute your insights to our shared understanding. As a global association, our collective expertise knows no borders — and it is strongest when shared.

Questions of legality

Neil Roberts
Head of Marine and Aviation, Lloyd's Market Association and Chair of the IUMI Policy Forum

There are decades where nothing happens; and there are weeks where decades happen. Whether Lenin said this or not, the pace of geopolitical change is bewildering. The actions of the US in particular, are changing the world on an almost daily basis.

The extraordinary spat over Greenland where the US already had full and free access under its 1951 treaty is widely thought to have done more damage to the US reputation than tariffs. For Europe to deploy troops and consider sanctions against its strongest ally would not have been predicted by a rational observer a year ago.

Actions in the Gulf, have, whatever the aim, generated among other things a great deal of commercial disruption and significant concern in the Asian countries who are so reliant on Hormuz for their oil supply. Then there are the "backyard" issues around Mexico, Cuba and Venezuela with Venezuela having second order effects.

The seizure of the *Marinera* off Iceland was perhaps the most eye-opening for marine insurers. This was done ostensibly for a breach of sanctions raising the question of whether sanctions supersede international law. The vessel was in previously inviolable international waters and claiming and claimed by the Russian Flag.

Under UNCLOS Article 110, naval vessels are allowed to interdict stateless vessels. But the US has not ratified UNCLOS, which is possibly why the sanctions point was taken. Naturally underwriters are interested to understand the grounds for seizure as insurance depends on the law and is equally binary. There is either cover and exposure or there is not — owners do not want to be guessing.

If the *Marinera* (ex *Bella 1*) had not correctly changed flags, it could be assumed that the previous flag (Guyana) was in place. However, it seems this had been rescinded, meaning the vessel had no flag at all. If any vessel is really stateless it should be questioned at flag, port and government level how this is possible. It can be inferred that the vessel was at the least allowed into port A to load, was allowed to depart and was scheduled to call at port B where it would be allowed to unload.

That is a fair number of regulatory and convention fails by two or more countries and their Port State Control because the vessel would be uninsured. Then there was the chain of traders, charterers and owners involved in the voyage, knowing that no claims would be payable for hull, cargo or pollution.

It seems the shipping underworld is playing Russian Roulette with the law-abiding trading community and their coastlines. Sooner or later, one of the ageing vessels will cause a significant pollution affecting an innocent country and it will be down to the victim to clean up and mitigate the environmental damage. The marine world knows this, but the rest of the world appears to be either not listening or not interested.

Photo: US Coast Guard

US-Israel Iran war provokes shipping lane shifts

Chris Rogers, Head of Supply Chain Research and **Ines Nastali,** Senior Supply Chain Intelligence Analyst, S&P Global Market Intelligence, an IUMI Professional Partner

The US and Israel on 28 February launched a large-scale, coordinated air campaign against Iran, striking a broad range of leadership, military, security and nuclear targets. A forced government change is now a key objective according to S&P Global Market Intelligence country risk analysts.

An extended closure of the Strait of Hormuz will disrupt both crude oil and LNG shipments. For LNG, Qatar, the UAE and Oman (which may be affected indirectly) accounting for 20.9% of global trade in LNG in 2025, with Pakistan and India most exposed to supplies from the three.

Without an extended closure of the Strait or the destruction of liquefaction assets, the impact is unlikely to be long-term in nature. IRGC targeting is likely to expand to critical Gulf energy infrastructure if US and Israeli strikes target Iranian critical national infrastructure and major crude export terminals according to market intelligence.

Container shipping faces disruptions both to transshipment hubs including Jebel Ali within the Strait of Hormuz as well as via the Red Sea due to increased attack risks from the Houthi regime in Yemen. Container lines including CMA CGM and Maersk have already suspended shipping via the Red Sea. Emergency surcharges for shipping in the Gulf and Red Sea of up to US$3,000 per forty-foot equivalent unit have already been applied. A return to rates seen in January 2024 could result in rates two to three times higher than current levels.

Critical is whether regime change occurs, with the resulting peace reducing support for Houthi attacks on shipping, allowing a return to fundamental supply and factors to drive rates. If conflict continues, rates could remain elevated. The uncertainties are likely to mean that cargo owners will pursue a mixture of locked-in and indexed rates.

Global air freight networks face challenges from the halt to flights through many of the regional ports, including the hubs of Doha and Dubai, which handle around 2.6 million metric tons and 2.2 million metric tons of airfreight respectively, or around 4.0% of the global total.

The disruptions to Red Sea shipping come just as changing US tariffs bring inventory front-loading pressures, with the share of US imports from Asia via the east coast US ports reaching 39.8% in the three months to January 31, 2026.

Click here to read more.

Hendrike Kühl
IUMI Policy Director

Fire protection top of the agenda for IUMI at IMO

Enhanced fire detection and protection onboard containerships and vehicle carriers has been a longstanding priority for IUMI. At last week's 12th session of the IMO's Ship Systems and Equipment Sub-Committee, IUMI participated with strong support from our membership to advocate for regulatory improvements for both vessel types. Sebastian Kempka, IUMI Loss Prevention Committee Member and Senior Consultant at KA Köln Assekuranz, provided invaluable input to the discussions on containership fire safety. Ricky Braz, Master Mariner and Marine Underwriter at Munich, offered his expertise in the deliberations on vehicle carrier fire safety.

From IUMI's perspective, a key priority to advance containership fire safety has been SOLAS amendments which would mandate the installation of fixed water monitors that can reach the entire deck cargo area. This would be a significant improvement compared to the current requirements which merely mandate portable water monitors and water mist lances. The benefit of fixed water monitors is the much wider reach compared to the limited reach of mobile water monitors. Moreover, the fixed installations have a much stronger cooling effect since the water reaches the burning container(s) from the top.

→

Fire protection top of the agenda for IUMI at IMO
Continued

The image below (figure 1) illustrates why fixed water monitors have the potential to contain a fire in the space of origin which is much less likely when using portable alternatives.

Since the SSE Fire Protection Working Group has a large number of agenda items to deal with, at this session it was not possible to discuss the SOLAS requirements for fixed water monitors. Instead, the guidelines for water mist lances and related SOLAS amendments were completed, as was the mandatory requirement for the carriage of portable infrared cameras to enable the crew to better locate a fire. Both changes will come into effect for newbuild vessels from 2032 onwards.

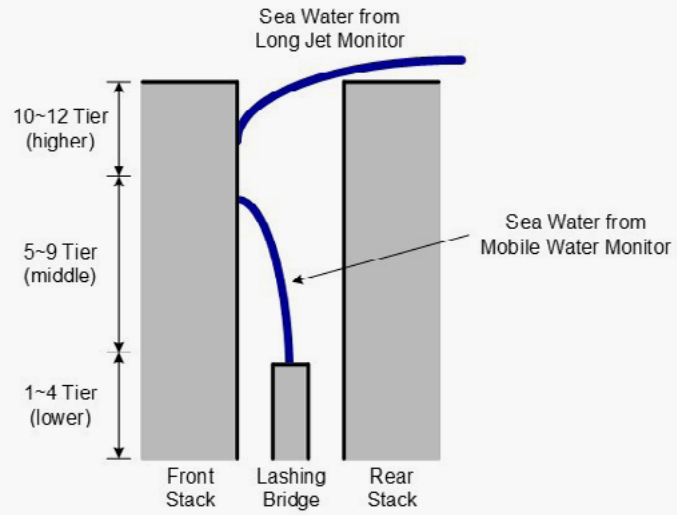
For the work on fire safety for vehicle carriers that carry new energy vehicles, IUMI's main objectives include implementing improved detection measures and better ways to contain and fight fires. Since a large number of IMO Member States and observer organisations are interested in this work, many proposals have been submitted under this work item. During this session, the Fire Protection Working Group revised a draft action plan to address risks of new energy vehicles. It was further decided to focus primarily on battery electric vehicles rather than all new energy vehicles. A second important decision was to prioritise vehicle carriers such as PCTCs and PCCs since this is the ship type that suffers most incidents. Other roro cargo and ropax vessels will be reviewed once new requirements for vehicle carriers have been agreed by the SSE Sub-Committee. A Correpsondence Group has been tasked to develop draft interim guidelines for vehicle carriers which will serve as a basis for future SOLAS amendments. Similar to the ongoing work on containerships, the regulatory changes in SOLAS are planned to be finalised by 2029 so that they come into force in 2032.

Special thanks to Sebastian Kempka and Ricky Braz who made their way to London to support the IUMI delegation. A highlight was our short stint with the IMO Secretary General Arsenio Dominguez who wasn't shy and agreed to join us for an impromptu photo.

We are grateful to all IUMI members involved in our Fire Protection Working Group who continuously provide thoughtful input so that IUMI's views and positions can be fed into the IMO process:

Charles Fernandez	Canopius
Mikkel Anders	Gard
GE Qi	Cosco
Marc Sommerfeld	GDV
Sebastian Kempka	Köln Assekuranz
Andrew Kinsey	Integrated Specialty Coverages
Neil Roberts	LMA
Ricky Braz	Munich Re
Geir Jørgensen	Skuld

Figure 1
Fixed water monitors



Source: Team Sol Inc., KOREA

Special feature
Fake carriers

IUMI and TAPA EMEA issue joint statement to warn about fake carriers

Hendrike Kühl
IUMI Policy Director

Together with our affiliate organisation, the Transported Asset Protection Association (TAPA) EMEA who is specifically focused on the fight against cargo crime, IUMI issued a joint statement to warn marine insurers and stakeholders across global supply chains of the risk of cargo crimes and particularly the growing rise of fake carriers.

According to TAPA's intelligence system, nearly 160,000 cargo-related crimes were recorded across 129 countries between 2022 and 2024, with total losses estimated to reach several billions of Euros. While traditional threats such as hijackings and theft remain a problem, both organisations warn that cargo crime is rapidly becoming more sophisticated and digitally enabled. Although conventional theft from trucks and warehouses are still prevalent, cargo crime is evolving. Criminals are increasingly using digital tools to conceal their true identities, the creation of shell companies and legitimate firms being cloned using stolen credentials. Forged email addresses, look-alike domains and fake insurance certificates are increasingly common. Artificial intelligence will accelerate these activities, making deception easier to scale and significantly driving up losses.

In response to these growing risks, IUMI and TAPA EMEA are calling for urgent action by supply chain stakeholders and government authorities. The organisations have jointly published advice for shippers, logistics providers and insurers aimed at strengthening resilience against both physical and digital threats. Recommendations include continuous vetting of carriers and drivers; verification of contacts, documentation and insurance credentials; adherence to recognised security and operational standards; increased vigilance for abnormal behaviour; and greater use of secure facilities and route planning.

A crucial element in the fight against cargo fraud are freight exchange platforms. They have a key responsibility to ensure no bogus carriers can operate on these platforms. IUMI and TAPA EMEA encourage these platforms to implement robust identity verification and fraud detection protocols, including multifactor authentication. Their support and cooperation is essential to closing loopholes which are increasingly being exploited by fake carriers.

Download the IUMI & TAPA EMEA statement here.

IUMI

TAPA EMEA
Transported Asset Protection Association

Special feature
Fake carriers

Tiina Ruhlandt, Managing Director, EIMC (an IUMI Professional Partner) and **Timothy Kennedy**, Vice President, Director – Loss Control Services, Starr Marine. Both are members of the IUMI Loss Prevention Committee.

Cargo theft USA update – Where do we go from here?

On the heels of the recently issued joint warning on fake carrier fraud and cargo crime risks issued by IUMI and TAPA EMEA, it is timely to review preliminary cargo theft data released for 2025 and examine methods to combat the rising trends, especially strategic theft and fraud.

While CargoNet reports total theft incidents to be down 6%, the average value has increased by more than 30% in 2025. Total estimated losses in US and Canada for 2025 is approximately US$725million.

Fortunately, there are both reactive and proactive measures to counter this issue. Some would argue that higher liability limits or risk transfer to brokers and carriers are necessary. On the legislative side, harsher sentences for cargo criminals have been necessary for years, though are just now increasing in visibility.

On the proactive side, recommendations for vetting carriers and drivers are clear. In the US, workers need a TWIC (Transportation Workers Identification Credential) to obtain unescorted access to secure areas of maritime facilities. In 2025 REAL ID-compliant identification became required for domestic air travel. Blockchain technology emerged in 2009 but is still not widely adopted in transportation and logistics. After initial excitement in the late 2010s and several promising initiatives, most faltered due to lack of critical mass adoption.

The obstacles to managing safe transportation are multiple and connected:

— Cost of cargo security resources, while constantly becoming more affordable, is often an economic pressure point that supply chain procurement cannot ignore.

— Complex legal and regulatory environment that typically spans multiple jurisdictions (including privacy laws).

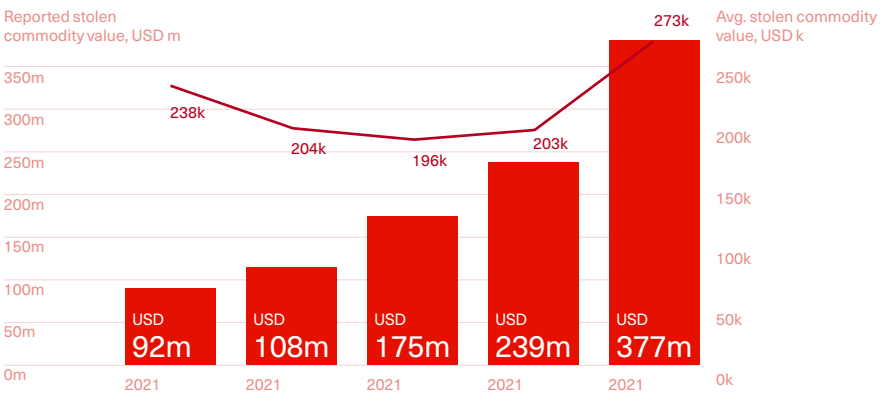
— Cargo crime enforcement is often a challenge due to funding, availability and light sentences for cargo criminals.

— Verifiable documentation for carriers is perhaps the fastest growing issue in the industry — without appropriate readers/scanners, facilities cannot verify whether ID is counterfeit, expired or revoked.

Fortunately, solutions exist though the most effective are not necessarily the most accessible. Unless we go back to Roman times or torn playing cards, secure ID cards and scanners to read them are essential. A renewed focus on blockchain technology – potentially in combination with IoT devices and AI algorithms – must be supplemented by proactive human intervention.

The time is ripe for the transportation and logistics industry to outplay the criminals. Beneficial cargo owners and their insurers also have a vested interest to encourage and support adoption of new security measures.

Cargo theft by total and average loss value
Date range: January 1, 2021 to December 31, 2025



Source: Verisk Analytics, 2025

Credit to: CargoNet

Special feature
Fake carriers

Cargo theft Latin America: Reducing loss frequency

Samuel A. Markov
Director, ARM Services an IUMI Professional Partner

Latin American cargo risk is often framed through national crime statistics and hotspot mapping. For underwriters and marine cargo practitioners, however, a more predictive approach focuses on regional operational pain points and, above all, control maturity — the ability of supply chain stakeholders to design, implement and verify preventive measures consistently. A significant portion of losses stem not solely from criminal sophistication, but from operational friction, fragmented accountability and weak verification discipline — factors that are materially improvable through better governance.

Key regional drivers of loss frequency

A recurring exposure arises from routine operational practices rather than transit itself. Dwell time — waiting, staging, informal stops and route deviations — often presents greater vulnerability than movement. Loss frequency correlates less with nominal "security presence" and more with demonstrable route governance, dwell-time controls and auditable compliance, particularly where exceptions are common.

Infrastructure quality and availability remain uneven across the region. Even where secure parking or controlled facilities exist, consistent usage is not guaranteed. This creates a gap between underwriting requirements and operational reality. Effective controls are those that measurably reduce preventable dwell exposure and can be verified through monitoring, documentation and exception handling.

Layered subcontracting further complicates custody and accountability. The risk lies not in subcontracting itself, but in poorly governed handoffs: unclear authorization to collect, redirect, or modify shipments; weak identity checks; and inconsistent documentation integrity. Small failures at these transition points can compound into high-severity losses.

Insider risk also plays a material role. Information leakage, procedural bypass and collusion enable both theft and fraudulent diversion. As a result, integrity controls — segregation of duties, traceability of decisions, controlled access to shipment data and credible escalation pathways — are operational necessities, not optional enhancements.

Finally, under-reporting and inconsistent incident classification limit the usefulness of loss data. In such environments, underwriting must rely more heavily on control evidence and governance quality than on statistics alone.

The convergence of physical theft, fraud, and cyber deception

Cargo losses increasingly combine digital initiation with physical execution. Credential compromise, email spoofing, documentation manipulation and platform exploitation can enable fraudulent pickups or diversions before traditional security measures engage. For Latin America, this does not replace conventional theft but expands loss causation to include identity and process compromise — often hidden behind strong physical controls.

Underwriting through a control-maturity lens

A control-maturity approach shifts focus from geography to sustainability of controls. Evaluation centres on route and dwell governance, counterparty verification and change control, node security and accumulation management and mechanisms for detecting bypass and learning from losses. This prevention-oriented framework helps bridge the gap between underwriting intent and operational execution.

Latin American cargo risk reflects repeatable operational weaknesses increasingly amplified by fraud and cyber-enabled deception. Improving resilience depends less on country labels and more on the maturity of controls — their design, verification and continuous improvement across the supply chain.

The full version of this article is available on the IUMI website.

People at IUMI

Helga Grønlund Hodne

Helga Grønlund Hodne has recently taken over as Chair of the IUMI Salvage Forum. In this Q&A, we ask her to introduce herself to the IUMI family.

When did you first get involved with IUMI and why do you feel it is important?

I first got involved with IUMI in 2022 as Secretary for the Salvage Forum. For me, IUMI is a place where I meet dedicated colleagues from across the world to discuss marine insurance topics at a high level. It is also a place to make new friends and build strong professional relationships. IUMI has given me the opportunity to collaborate and share knowledge with a global industry that is constantly evolving; and I believe IUMI continues to play an important role as a trusted and influential voice for the global marine insurance community.

What is the primary role of the IUMI Salvage Forum?

The IUMI Salvage Forum's primary role is to represent and promote marine insurers' interests and views with respect to salvage and general average. The members of the Forum all have experience with salvage from their professional careers, and together we monitor and discuss developments within the salvage industry that may be relevant to IUMI's membership. Topics of interest can be recent salvage awards published by the Lloyd's Salvage Arbitration Branch (LSAB), relevant insurance clauses in the market as well as practical or legal salvage issues. Members of the Salvage Forum also represent IUMI in several committees and working groups on salvage across the industry.

What is your day job and how did you get to that position?

My day job is Assistant Vice President in the Claims team at Skuld, based in Oslo, Norway. With a legal background, I hadn't originally planned a career in marine insurance, but ever since my first day as an assistant claims handler in 2017, I've found it to be an incredibly rewarding career path. Working closely with claims gave me a valuable insight into the practical side of marine insurance. Quite early on, I found myself particularly drawn to salvage cases and large casualties – an interest that has shaped my career and eventually also led me to my role at IUMI.

What is the best piece of advice you've received?

A great advice I've received is that if self-doubt starts creeping in — especially when stepping into a different role or new responsibilities — remember to be yourself and be true to who you are. That is why you were given the responsibility in the first place.

What do you like to do away from the office?

Those who know me know that I spend as much time as I can enjoying the outdoors, whether on a bicycle, hiking in the forest, fishing in the mountains or sailing. As an avid music fan, I also play the drums and I am proud to be a member of our in-house band at Skuld, "The Rocky Vessels"!

Personal electronic device distraction in bridge resource management

Capt. Danny Duzich
Senior National Marine Surveyor, NAMS-Certified / Global Executive General Adjuster

Sedgwick
IUMI Professional Partner
sedgwick.com

In confined waters where traffic is dense and margins are tight, strong bridge resource management (BRM) is critical for preventing harm to people, property and the environment. One of the most common threats to effective BRM today is distraction from personal electronic devices (PEDs).

An overtaking casualty in a congested pilotage waterway illustrates the risk: A large vessel overtook a smaller power driven vessel without proper lookout, signals or action to keep clear, resulting in a stern impact, flooding and capsize.

The investigation identified non-operational cell phone use among the bridge watch team immediately before and during the collision, along with other human element failures. Because they were distracted, the watchkeepers did not effectively monitor the incoming vessels, communicate clearly or establish an agreed overtaking plan. They were also fatigued and using degraded radar components which led to missed warning signs and a breakdown of basic watchkeeping standards.

This case is a stark reminder that technology cannot compensate for distraction. Tools like radar, AIS and ECDIS are only effective when they're actively monitored and cross-checked. When watchkeepers use PEDs, their visual scanning slows, they miss audio cues and their mental focus shifts — turning monitoring systems into passive displays rather than active safety barriers. In confined waters where traffic patterns can rapidly change, even a few seconds of distraction can lead to a catastrophic event.

One of the most effective ways to prevent PED distraction in BRM is by implementing a sterile bridge policy. During confined-water transits and manoeuvres, there should be zero PED use, clearly defined roles and only essential, closed-loop conversations among the watch team. Leaders should also ensure equipment is regularly maintained and implement measures to manage fatigue and promote strong voyage planning.

This situation is just one example of how a momentary lapse in attention can quickly unravel multiple layers of defence in a narrow navigable waterway. By learning from incidents like this and strengthening technical and human element controls, our industry can reduce the risk of similar losses in confined or pilotage waters.

https://www.sedgwick.com/loss-adjusting/global-specialty/marine/

Welcome to Cristina Guerrero Fabra

We are delighted to welcome Cristina Guerrero Fabra to the IUMI Secretariat as our new Policy Officer. Cristina brings a strong legal background and valuable experience working with national and international insurance associations. We are very happy to have her onboard and are confident that she will be a valuable and pleasant addition to our team.

We asked her to introduce herself and her new IUMI role:

You've been employed by IUMI in a completely new role – tell us about that.

When I first read the job description for the Policy Officer role at IUMI, I immediately felt it brought together all the elements I had been looking for. It combined policy-related work at an international level with the insurance sector, an area where I had already gained experience at both national and European level. That mix of global perspective and sector-specific expertise felt like a natural progression for me.

What made it even more appealing was the fact that it is a newly created position. There is something particularly motivating about stepping into a role that offers room to shape its development, explore new areas and continue learning.

I also remember my first meeting with Lars and Hendrike from the Secretariat, even though it was online, I immediately felt a strong connection. Our conversation was open, engaging and forward-looking and it confirmed my sense that this was not only the right professional step, but also the right team to join.

What would you like to achieve over the next year or two?

Above all, I want to learn. I'm very aware that marine insurance operates in a highly specialised and globally interconnected environment, and I see the next couple of years as an opportunity to really immerse myself in its technical, legal and regulatory dimensions. There is a lot to absorb and I'm approaching this role with curiosity and humility.

I would like to dive deeply into the full range of topics relevant to IUMI's work and develop a solid understanding of how they affect members in practice. At the same time, I hope to build strong working relationships with colleagues, member associations and external stakeholders. Establishing trust and open channels of communication will be essential, and I see that as just as important as mastering the substance of the files themselves.

In short, my goal for the first phase is simple: learn as much as possible, contribute thoughtfully, and lay the groundwork for meaningful and well-informed policy engagement.

What are your thoughts on IUMI's role in the marine insurance sector and where do you see yourself adding value?

IUMI occupies a unique and highly respected position within the marine insurance landscape. As a global platform, it brings together diverse national and market perspectives while speaking with a coherent voice on issues that shape the sector worldwide. In a period marked by geopolitical uncertainty, sustainability challenges, technological advancement and an evolving regulatory framework, the convening and coordinating role is more important than ever.

I see myself contributing to this bridge-building function by translating complex regulatory or policy developments into practical implications for members, and conversely, helping to reflect members' experiences back into international policy debates. My aim is to contribute analytical clarity, structured thinking and a collaborative mindset that strengthens IUMI's voice and supports informed decision-making.

Tell us a bit about your background and how you came to be an expert in shipping/insurance analysis?

I started my career in Brussels as a policy analyst in financial services, which gave me insight into European regulation and policymaking. My interest soon shifted to the insurance sector, leading me to the European Federation of Insurers, where I deepened my expertise in insurance policy and regulatory analysis.

After some years, I decided to return home (and enjoy a bit more sun) while staying in the insurance field, joining the Spanish association of insurers. That experience helped me understand how European and international developments translate into practical impacts at a national level, consolidating my expertise in insurance analysis.

→

Welcome to Cristina Guerrero Fabra
Continued

What are you most looking forward to in your new role?

I am especially looking forward to the intellectual depth of the topics and the international dimension of the work. Marine insurance touches on everything from environmental regulation and sanctions regimes to technological innovation, digitalisation and complex liability questions. The breadth and complexity of these issues make the field both challenging and stimulating. Equally, I am excited about working closely with colleagues and members from different jurisdictions and professional backgrounds. There is great value in learning from practitioners who bring decades of experience and from associations that operate in very different legal and economic contexts.

Where would you like to see life take you in the future?

Professionally, I hope to continue developing into someone who combines technical expertise with strategic insight, someone who can navigate complex policy environments while maintaining a clear sense of direction. More broadly, I aim for a career that remains intellectually stimulating and internationally oriented. I value environments where learning never really stops and where collaboration across borders is part of everyday work, like in IUMI.

On a personal level, I simply hope to maintain balance: continuing to grow professionally while preserving time for family and friends.

What's the best piece of advice you've received?

Someone very close to me has always said: "If it depends on you and your work, then it's in your hands to make it happen: you just have to put in the effort." I have carried that mindset with me throughout my studies and professional life. It is a simple message, but a powerful one. It reinforces the idea of personal responsibility and reminds me that while not everything is within our control, effort, preparation and commitment certainly are. That advice has encouraged me to approach challenges proactively, to stay disciplined even when progress feels gradual, and to trust that consistent hard work ultimately makes a difference.

And finally, tell us something about yourself that no one else knows!

Very few people know that I genuinely enjoy building IKEA furniture. I find the process surprisingly relaxing, there is something very satisfying about starting with a box of separate pieces and methodically turning it into something functional.

Case study: A global capacity for perishables cargo risk

Guido Turina
Senior Marine Underwriter

BARBUSS Global
IUMI Professional Partner
barbuss.com

When structuring a large-scale cargo insurance programme for an exporter of temperature-controlled perishable goods, the primary challenge is designing comprehensive maritime and land transit coverage for an operation moving hundreds of millions of dollars in cargo annually to major global destinations. By leveraging global reinsurance capacity, advanced technical expertise and a highly experienced strategic broker, it is possible to deliver an innovative and sustainable insurance solution for a highly complex logistics exposure.

Client and risk profile
The insured is a major regional exporter operating a large seasonal perishables programme under strict temperature-controlled conditions. The operation involves extensive international distribution across dozens of global markets, creating significant exposure to transit delays, temperature deviations and accumulation risk. These factors required highly customised policy terms beyond conventional transport insurance frameworks.

The challenge
Perishable cargo presents inherent risks that are often restricted or excluded by standard market policies. The scale, sensitivity, and geographic spread of the insured's operations demanded an integrated, all-risk solution with bespoke wording capable of addressing temperature fluctuation, transit interruption and operational complexity—while remaining commercially viable and reinsurable.

Strategy and development
The strategy was built on four pillars: innovation, technical specialisation, global capacity and collaboration. We applied a risk-engineering approach, modelling loss scenarios specific to perishable logistics. Detailed risk profiling quantified loss ratios, recovery expectations, deductibles and pricing assumptions, forming a robust data-driven foundation for underwriting.

Given the size of the exposure, securing sufficient reinsurance capacity was critical. Through transparent presentation of underwriting discipline, risk controls and historical performance, we successfully engaged a global reinsurer panel. A key brokerage partner played an essential role in translating operational realities into precise underwriting requirements, ensuring alignment across all stakeholders.

Challenges and client management
The placement addressed two primary challenges: complex policy wording and capacity sourcing. Custom clauses were drafted to address risks unsuitable for standard policy forms, while continuous communication with the broker and insured guaranteed expectations were met and coverage aligned fully with operational needs.

BARBUSS

Autonomous sailing on Europe's inland waterways

Frouwke de Vries
Secretary General IVR and a member of the IUMI Inland Hull, Fishing Vessels and Yachts (IFY) Committee

Autonomous sailing in inland navigation has moved beyond theoretical debate and is now entering commercial reality. In this edition of the IUMI Eye, I share some relevant developments with respect to autonomous sailing in continental Europe.

First, we start with a little background information. The need for international definitions (and thus a regulatory framework) was already identified almost a decade ago. Following a proposal at the Consultative Conference on 10 October 2017, the Central Commission for the Navigation of the Rhine Secretariat began drafting international definitions, which were presented during the annual conference of the IVR in May 2018. By the end of the same year, in December 2018 the CCNR adopted the first international definitions of inland navigation automation levels.

These definitions introduced automation levels for inland navigation ranging from level 0 (no automation) to level 5 (full automation). In 2022, the CCNR published a vision to support the harmonised development of automated navigation via a holistic and technologically neutral approach.

Since then, the rapid development of various technologies increased with concrete examples of various Shore Control Centres in Belgium, The Netherlands and Germany.

In the beginning of last year, the GDV, representing the German Insurance Sector, published an interesting position paper which stated that insurers are in principle prepared to insure automated ships, even though the risks of (semi-) autonomous sailing are still largely unknown. For insurers it is important that they are granted full access to high-quality, accurate operational data from the insured vessels. To mitigate these risks and to assess them adequately the development of standards and regulations to accelerate technological development and maximize the safety of inland waterway transport is needed. According to the German Insurance Association, the safety level of (semi-)autonomous ships must be at least as high as that of traditional ships.

The Flemish Government (Belgium) approved a new decree on 17 October 2025 that allows automated, remotely controlled and low-emission inland vessels to operate commercially, moving beyond temporary pilot projects. Companies must prove their vessels are as safe as conventional ones by submitting technical data, risk analyses and possibly pilot results to the Commission of Experts. It is encouraging to note that, in line with the position of the GDV, the Flemish authorities explicitly uphold the principle that automated vessels must demonstrate a

Autonomous sailing on
Europe's inland waterways
Continued

safety level at least equivalent to that of "conventional" vessels.

Once approved, vessels receive a supplementary certificate permitting commercial use of innovative systems.

A further notable development occurred in January this year as HGK Shipping received a permit for the remote control of a hazardous goods tanker.

HGK Shipping has become the first shipping company to receive a one-year test permit in Flanders allowing an inland hazardous goods vessel to be operated remotely from a shore-based Remote Operations Centre (ROC). This significant development was granted by the licensing authority De Vlaamse Waterweg nv (Flemish Waterways plc) and marks a next step in automated sailing.

The permit applies to the chemical tanker *Walcheren,* which can be controlled remotely on designated waterways east of Antwerp.

Instead of the usual two boatmasters on board, the vessel now operates with one boatmaster and one deckhand, aiming to improve operational efficiency without compromising safety. A qualified ROC operator will steer the vessel remotely for up to four hours, while onboard crew monitor systems and support safe navigation. HGK expects that these remote operations will expand across its fleet in the future, working closely with regulators in the Netherlands and Germany.

This next step illustrates the potential for technology to support inland navigation operations and may contribute to addressing the ongoing shortage of specialist staff. The permit also indicates that authorities do recognize the safety and reliability of the remote operations technology under the current regulatory framework.

While regulatory authorities are gradually enabling remote and automated operations and technology is developing at a significantly faster pace, the private law framework (and the potential liability implications) remain largely untested. For insurers, this does not necessarily prevent underwriting these autonomous inland vessels, but it does require more enhanced data, contractual clarity and clear underwriting assumptions. Many key open questions for marine underwriters arise. To name a few:

— Who is legally navigating when the vessel is controlled from a Shore Control Centre?

— How will liability be allocated between shipowner, ROC operator and technology provider?

— How will causation be established in case of system failure versus human intervention?

— Does remote operation increase cyber aggregation risk?

The coming years will therefore be decisive in shaping how liability, limitation and insurability will be structured in the marine insurance practice.

The Italian approach to marine surveying in hull & machinery claims

Giuseppe Averame
Managing Director

Rely Marine and Energy
IUMI Professional Partner
relymarine.com

Independent technical scrutiny as the foundation of fair and defensible adjustments

In the marine insurance market, the core duties of surveyors appointed by Hull and Machinery underwriters are broadly consistent internationally. Surveyors are expected to assess, with objectivity, the circumstances of a casualty, ascertain the nature and extent of damage, evaluate the appropriateness of repairs undertaken or proposed and investigate the root cause of the incident. They also assist underwriters in the technical evaluation of claims submitted by shipowners.

Within this shared framework, the Italian market displays structural characteristics that differ from those commonly observed elsewhere. In Italy, underwriters generally require a broader and more integrated technical contribution from appointed surveyors, extending beyond damage assessment to encompass a comprehensive review of the claim as a whole.

Surveyors are commonly asked to provide reasoned technical opinions on most elements of a claim, including cost items that elsewhere might not ordinarily fall within their traditional scope of responsibility. This may involve assessing the necessity, proportionality and economic justification of individual expenses, thereby supplying underwriters and average adjusters with a technically substantiated basis for adjustment. The distinction between surveyor and Adjuster remains clear: the former provides independent technical analysis, while the latter performs the financial and contractual adjustment.

This approach is particularly evident in recurring areas of claims handling. By way of example, in cases involving deviation to a repair port, surveyors are typically requested to analyse the fuel consumption claimed, taking into account the vessel's characteristics, speed and efficiency, distance sailed and prevailing conditions, as well as the technical and economic suitability of the selected port. They may also evaluate the necessity and duration of superintendent attendance during repairs and the technical justification of crew bonuses associated with repair activities.

In many other markets, such matters are often addressed directly by the average adjuster, sometimes without prior technical scrutiny or only following the appointment of an additional consulting expert. The Italian system should not, however, be regarded as inherently more complex. Rather, it reflects a different allocation of technical responsibilities within the claims process. In some markets, additional clarification may be sought from a consultant surveyor at a later stage of the adjustment. In Italy, the appointed surveyor generally provides comprehensive technical comments from the outset, reducing the need for subsequent technical reinterpretation.

The Italian model reflects a broader legal and professional culture that attributes significant weight to independent technical assessment. This principle is also evident in maritime disputes through the *Accertamento Tecnico Preventivo (ATP),* which, under Article 696 of the Italian Code of Civil Procedure, provides for the urgent preservation of technical evidence where there is a risk of alteration or loss, while Article 696-bis provides for a non-urgent, expert-led technical appraisal aimed at facilitating an early, out-of-court settlement.

Both approaches ultimately pursue the same objective across markets: fairness, transparency and technical accuracy in the resolution of maritime claims. The difference lies not in the result, but in the procedural path through which technically substantiated conclusions are reached.

RELY.
Marine & Energy Experts

Green hydrogen and carbon capture: Transforming the marine industry for a sustainable future

Adam Reed
Global Leader — Offshore Renewables & Upstream Energy, Allianz Commercial and a member of the IUMI Offshore Energy Committee

The marine industry, as a cornerstone of global trade and transportation, is facing increasing pressure to decarbonize as part of the global push toward achieving net-zero emissions. With shipping accounting for nearly 3% of global greenhouse gas emissions, innovative solutions are urgently needed to reduce the sector's environmental footprint. Two technologies are emerging as potential game-changers in this effort: green hydrogen and carbon capture and storage (CCS).

Green hydrogen, produced through the electrolysis of water using renewable energy, is gaining traction as a clean alternative fuel for the shipping industry. Unlike traditional marine fuels such as heavy fuel oil, green hydrogen emits no carbon dioxide when used, making it an ideal solution for reducing emissions in the maritime sector.

Hydrogen can be utilized directly in fuel cells or converted into ammonia, a more energy-dense fuel that is easier to store and transport.

Major shipping companies and ports are already exploring hydrogen-powered vessels and ammonia bunkering facilities, with pilot projects underway in Europe, Asia and the Americas.

At the same time, carbon capture and storage is emerging as a complementary technology to address emissions from existing vessels and infrastructure. CCS involves capturing carbon dioxide emissions at their source — such as from ship engines or port facilities — and storing them underground in geological formations.

This technology can serve as a transitional solution, enabling the marine industry to reduce its carbon footprint while the adoption of green hydrogen and other alternative fuels scales up.

Additionally, onboard carbon capture systems are being developed to retrofit existing fleets, providing a pathway for older ships to comply with tightening emissions regulations.

The integration of green hydrogen and CCS has the potential to revolutionise the marine industry. For instance, green hydrogen production facilities can be co-located with CCS infrastructure, capturing and storing emissions from hydrogen production processes that rely on natural gas during the transition phase.

This hybrid approach ensures progress toward decarbonization while addressing current technological and economic challenges.

CCS also presents a potential opportunity for shipowners and builders, with carriers of liquefied CO2 likely to be required in order to ensure efficient transport of significant volumes from the sites of production to those of injection.

One of the world-leading CCS projects, Northern Lights in Norway, in which Equinor, Shell and Total are partnering, is already employing such technology.

By 2027 the International Maritime Organization (IMO) is due to implement a 2050 net zero greenhouse gas emissions target, and green hydrogen and CCS are poised to play pivotal roles. By investing in these technologies, the marine industry can chart a course toward a cleaner, more sustainable future while maintaining its critical role in global trade.

Is nuclear a realistic propulsion option for the future?

Jarek Klimczak
MSc, Master Mariner, Chief Risk Consulting Officer, Specialty, AXA XL Risk Consulting and a member of IUMI's Loss Prevention Committee and ESG Working Group

The International Maritime Organization (IMO) has reaffirmed its goal for global shipping to achieve net-zero emissions by 2050, emphasizing the importance of innovative propulsion technologies. Nuclear propulsion offers a promising, though complex, solution to meet these targets, especially as the industry explores sustainable and low-emission alternatives.

IMO's decarbonization efforts include a minimum 20% reduction in greenhouse gas (GHG) emissions from international shipping by 2030, with a broader aim of zero emissions by 2050. The FuelEU Maritime Regulation, applicable within the European Union and the European Economic Area, mandates a 2% reduction in GHG emission intensity by 2025, escalating to 80% by 2050. It requires ships over 5,000 gross tonnage to meet "well-to-wake" emission standards, considering the entire fuel lifecycle.

Shipowners are exploring various decarbonization options, such as wind propulsion, advanced hull designs, exhaust gas cleaning systems, and alternative fuels like ammonia, hydrogen, and biofuels. These alternatives pose logistical and technical challenges, including storage issues, toxicity concerns (notably with ammonia), retrofitting costs, and port infrastructure limitations. A recent survey by the Global Centre for Maritime Decarbonization indicated that many industry players plan to deploy multiple fuel types by 2030, emphasizing a multi-fuel strategy for flexibility and resilience.

Nuclear propulsion remains a compelling, yet controversial, option. Currently used in icebreakers and naval vessels, the advent of Small Modular Reactors (SMRs) offers a new pathway. SMRs operate at lower pressures, reducing safety risks compared to traditional reactors. The NuProShip initiative, launched in January 2025, investigates Generation IV SMRs for maritime applications. Norwegian shipbuilder VARD highlighted the role of insurance companies in assessing the commercial viability of nuclear-powered ships.

However, several challenges hinder widespread adoption. The historic example of the NS Savannah (launched in 1962) showed high operational costs that limited commercial success. Modern advances aim to address these issues, but substantial investments are still needed. Regulatory frameworks are evolving; the UK's Merchant Shipping (Nuclear Ships) Regulations 2022 provide a safety foundation, but international standards are still under development. The International Atomic Energy Agency (IAEA)'s 2025 initiative seeks to establish a comprehensive global framework for civil nuclear maritime applications, including safety and liability protocols.

Insurance sectors will also need to adapt. New risk models, liability clauses, and coverage options are essential for nuclear shipping, given the potential for accidents and environmental impacts. The increased value of ships and port infrastructure due to nuclear technology will influence risk assessments and underwriting strategies.

Organizations like NEMO (Nuclear Energy Maritime Organization) play a vital role in fostering collaboration among stakeholders, promoting safe, sustainable nuclear maritime solutions. While nuclear propulsion offers a transformative potential, its success depends on technological, regulatory, and economic progress, supported by international cooperation.

Building a digital platform for marine insurance

Li-Hsuan Chen
Senior UX Designer

Instech Solutions AS
IUMI Professional Partner
instech.no

Have you ever experienced mixed feelings of excitement and uncertainty about new technology in marine insurance? In this historical industry, many professionals face a “digital dilemma”. It brings a challenging yet important task. How can technology be approached with respect to ensure it remains a natural extension of everyone´s daily work?

The why and the how
To achieve this, the work starts by listening. The process involves deep interviews, testing and observing how domain experts work to understand the “why” behind every behaviour. Then translating these insights into clear requirements using specialised UX (user experience) methods such as affinity diagramming, personas and user journey mapping. The analysis ensures the work stays focused on two core elements: the Intent (the Why) and the Action (the How).

The Intent guides the direction and makes sure that every solution built is meaningful and solves a real problem, while the Action is where creativity meets the power of technology.

In this phase, people focus on designing the right tools that make the client’s purpose clearer and easier to achieve, turning the deep knowledge of industry into an efficient digital vehicle. Although the heart of marine insurance remains constant, people are honoured to help craft the tools that carry that legacy forward.

The philosophy of development
Large-scale development always requires a delicate balance between microscopic details and a macroscopic vision.

To stay on course, the development process relies on a clear set of management tools. Frameworks like MVP (Minimum Viable Product) provide a focused starting point, while OKRs (Objectives and Key Results) align day-to-day tasks with long-term goals. These act as a dashboard and make sure the path remains fixed on the right destination.

Success in large-scale projects also comes from a deep commitment to iteration, a regular cycle of trying, learning and improving. Every two weeks, concise goals are set to allow for experimentation and reflection. In this environment, all doubts and questions are valued, allowing challenges to be met with collective ownership and shared solutions.

The developing process is much like navigating a ship, this requires a captain with a clear vision and a crew working in perfect harmony. True progress happens when a team avoids the trap of individual ego or indecisive consensus. Instead, a shared focus on the destination helps the journey moves forward with both speed and purpose.

Great platforms are never built alone. They are the result of combining the deep industry ‘Why’ with the technical ‘How’. What single challenge in your daily workflow could benefit from a thoughtfully designed digital solution? Let’s start a conversation.

Impact of China's newly revised maritime law on marine insurance

David Shang
Middle Market, Commercial Lines Underwriting Department, Huatai P&C Insurance Company Ltd and a Member of the IUMI Cargo Committee

On October 28, 2025, the newly revised maritime law of the PRC (effective May 1, 2026) was passed, which introduces key changes to Chapter 13 on marine insurance contracts, significantly impacting the marine industry in China.

A major change is the new Article 245, which explicitly subjects Builder's Risk Insurance to maritime law, resolving past legal uncertainty and applying stricter disclosure duties that favour insurers.

Article 248 refines the legal consequences of the insured breaching the duty of disclosure. It details rules for premium refunds upon contract termination and introduces a 30-day window for insurers to exercise termination rights, enhancing procedural clarity.

Article 249 establishes the insurer's duty to prompt and explain standard terms. Insurers must now prompt the insured regarding clauses that limit or exclude liability and other terms that materially affect the interests of the insured and explain them upon request. Failure to do so may render such terms unenforceable if the insured was genuinely unaware, offering a more balanced approach than the Insurance Law.

Article 259 formally defines and regulates open policies, setting default rules for cargo declarations and their consequences. It functions similarly to an "Errors & Omissions" clause, protecting the insured from unintentional declaration errors unless agreed otherwise, adding contractual flexibility. Of course, these are the default legal rules that apply in the absence of an explicit agreement between the parties. The law allows the parties to deviate from these statutory provisions by mutual agreement.

Article 261 reforms the treatment of warranties by removing the impractical requirement for the insured to notify the insurer of a breach. It clarifies the insurer's options post-breach and introduces an exception where the insurer remains liable if the breach had no impact on the loss, moving towards a more fact-based and practical regime.

These revisions enhance legal predictability, adjust risk allocation between insurers and insureds, and aligns the law with international marine insurance practices.

The full version of this article is available from iumi.com

Be Aware: Notice of US lawsuits may come via unexpected channels

Kevin J.B. O'Malley
Partner

Nicoletti Hornig Namazi Eckert & Sheehan, New York
IUMI Professional Partner
nicolettihornig.com

Insurers based outside of the United States of America should be aware that notice of a lawsuit against them in the United States may come through informal and unexpected means. Notice of a lawsuit may not be received through formal channels or by the insurer directly. Instead, notice sent to a general email address, to a third party or even via social media is possible.

Like other civil proceedings in the federal courts of the United States, disputes against foreign insurers must begin with proper notice. Rule 4 of the Federal Rules of Civil Procedure, treaty obligations and foreign laws govern service of process. The primary function of Rule 4 is to provide the mechanism for giving notice of the lawsuit to the defendant and indicating the court's assertion of jurisdiction over the lawsuit. This is usually accomplished by service of a summons and complaint on the defendant pursuant to the procedures set out in Rule 4.

The default method of service on a foreign company under Rule 4 is any internationally agreed means of service that is reasonably calculated to give notice, such as those authorized by the Hague Convention on the Service Abroad of Judicial and Extrajudicial Documents. Service under the Hague Convention typically takes three to six months but can take over a year in certain jurisdictions (e.g., Mexico and China). A plaintiff, and often the court, will not want to wait this long for the lawsuit to proceed.

Rule 4 thus permits service by other means as the court allows, so long as such means are not prohibited by international agreement. Plaintiffs can request substituted service within and outside the United States by a variety of mechanisms. Such mechanisms can include service via a third party like the insurer's US parent company or affiliate, the insurer's legal counsel or the insurer's third-party claims agent. They can also include service via alternative methods such as email, postal channels or even social media.

Substituted service often delays notice of the lawsuit finding its way to the proper individuals at the insurer. The import of such delay is that, under the Federal Rules of Civil Procedure, a defendant must serve its answer within twenty-one days after being served with the summons and complaint. Substituted service can compress this timeline greatly.

It would be wise for insurers to advise their employees who do not typically receive notice of lawsuits (e.g., custodians of general email addresses, social media team) and their third-party vendors of the importance of immediately forwarding such notices to the appropriate individuals for proper handling.

Netherlands: Country report for inland hull, fishing and yachts

Stefan de Rooij
Head of Marine Hull, Markel
and a member of the IUMI IFY Committee

The Dutch marine insurance market for inland hull, fishing vessels and yachts presents a stable yet dynamic landscape in 2025. The Netherlands continues to hold a leading position in European inland navigation, supported by a sizeable national fleet. The inland hull sector comprises approximately 4,500 vessels, while the fishing fleet consists of around 75 to 100 singletons plus nearly ten fleets, several of which are considered large professional operators. In recent years, the number of fishing vessels has dropped significantly due to a government scrapping program. The pleasure craft and yacht sector stands out with about 250,000 yachts and pleasure vessels, and the Netherlands was once again the world's largest producer of superyachts over 80 meters in 2024.

Shipbuilding activity remains quite strong. In 2024, the inland sector registered 37 newbuildings, while the superyacht industry continues to expand with approximately 20 new superyachts produced annually by renowned Dutch yards such as Oceanco, De Vries, Feadship and Royal van Lent. Rising construction values are notable across segments: inland passenger vessels now reach values of EUR 50–60 million, and top tier newbuilt superyachts can command costs of up to EUR 1 billion.

Market structure and capacity
The Dutch marine insurance market is well developed and offers substantial capacity. About a dozen insurers, managing general agents (MGAs), and mutuals operate in the inland hull segment. The fishing industry has fewer underwriters. In the yacht sector, several main providers cover vessels worth up to EUR 10 million, while options for higher-valued yachts are more limited. The market is also seeing consolidation as major brokers acquire smaller rivals. Additionally, foreign brokers — including insurers and MGAs from neighbouring countries — are becoming more active in the market. Total market capacity has expanded significantly in recent years and is estimated at EUR 300–350 million for 2025/2026, compared to around EUR 200–250 million available in 2023.

Trends and developments
Inflation continues to influence repair and claims costs, although overall inflation has decreased steadily since the peak in 2022. Innovation and sustainability are increasingly shaping the Dutch maritime landscape. Notable developments include the Zero Emission Services initiative for interchangeable battery containers, the first inland vessel running entirely on hydrogen and the introduction of the Inland Emission Performance Label. Certifications such as Green Award further encourage sustainable operational practices.

Climate change effects are also becoming more visible. Inland shipping faces recurring low water challenges on major rivers such as the Rhine and Waal, impacting cargo capacity, logistics and risk exposure. Meanwhile, the yacht industry expects greater risks from adverse weather — such as tropical storms and hailstorms in Europe — even though underwriting practices have not significantly changed.

Emerging risks are driving new clauses and coverage adjustments: inland hull policies include engine day-value provisions and preventative bridge collision terms; fishing policies are more frequently requiring due diligence measures, such as JH2023-010; and yacht policies show a growing trend in lithium battery clauses (JH2023-011) and restrictions for shipyard coverage.

Recently, there has also been a noticeable increase in pre-entry surveys, especially for fishing vessels (SPP) and inland ships (SPO). This could be due to narrowing profit margins and larger damage claims.

Crude oil shortages in VLCC transportation

Captain Paul Chauveau

Surveyor JLB Expertises
IUMI Professional Partner
jlbexpertises.com

Claims of crude oil shortages in VLCC transportation are not always indicative of actual physical loss. Generally, such discrepancies fall into two categories: true shortages, where cargo has physically decreased; and false or apparent shortages, commonly known in the industry as a paper loss.

A true shortage occurs when cargo physically disappears from the system. This may result from leakage, evaporation, transfer errors, or operational failures that remove oil from containment. By contrast, a false shortage arises when measurements at the discharge port indicate less cargo than expected, as the quantity originally recorded at the loading port was overstated or inaccurately determined. In many crude oil trades, a substantial proportion of reported shortages fall into this second category and are therefore measurement-related rather than physical losses.

Measurement uncertainty is inherent in crude oil transportation, especially in offshore loading and discharge operations. Many cargoes are loaded at single buoy moorings (SBM) or transferred by ship-to-ship (STS) in open sea. Under these conditions, vessels are subject to continuous motion from rolling and pitching, making precise tank gauging difficult. Unlike measurements taken alongside a stable berth, offshore gauging introduces additional variability that can accumulate into significant apparent discrepancies.

Incorrect estimation of basic sediment and water (BSW) content is another major contributor to false shortages. Net cargo quantity depends on accurate deduction of non-oil components. If sampling methods differ between ports, or if laboratory analysis is inconsistent, calculated net volumes may vary substantially even when the physical cargo remains unchanged. These technical differences in sampling and analysis frequently generate the appearance of loss where none has actually occurred.

While less common, true losses carry greater operational and insurance significance. Miscalculation of remaining onboard quantities (ROB) or onboard quantities (OBQ) can distort cargo balances. Leakage through pipelines, valves, or transfer systems may cause unintended movement of cargo between tanks, particularly when two different grades are carried under separate bills of lading. Such internal transfer errors may create a shortage in one parcel and an unexplained gain in another.

Evaporation also represents a loss phenomenon, particularly for volatile crude oils. When vapour containment is inadequate or tank vapour tightness is compromised, volatile organic compounds may escape. The tendency of crude oil to evaporate is strongly related to its vapour pressure, meaning lighter or more volatile grades present higher risk.

Cargo tank cleaning practices further influence measurable recovery. To reduce berth time, terminals may request that crude oil washing (COW) be minimised. However, limiting COW will increase the remaining onboard (ROB) quantities. Waxy crude oils present particular challenges in colder regions: when temperatures fall below the pour point, the cargo may solidify and adhere to tank surfaces. Crude oil washing under such conditions increases deposits and residual cargo remaining onboard.

Some residues, often referred to as clingage, may not be immediately visible at the discharge port. Oil adhering to internal tank structures can persist after discharge and only become evident later during transit, complicating reconciliation of cargo balances.

Industry practice commonly recognises a trade allowance of approximately 0.5 percent to account for normal measurement uncertainty. However, tolerance margins should not substitute for technical control. Minimising discrepancies requires calibrated equipment, reliable sampling, accurate temperature measurement, appropriate COW planning and disciplined measurement procedures—particularly during offshore operations where uncertainty is inherently higher.

Understanding the distinction between physical loss and measurement-related discrepancy is essential for accurately evaluating VLCC cargo shortage claims and ensuring fair commercial and operational accountability.

IUMI survey uncovers marine insurance's incremental path to transformation

Rahul Khanna, Chair IUMI Data & Digitalisation Forum and **Veith Huesmann,** IUMI Chief Analyst

A recent IUMI industry poll shows a sector progressing in digitalisation yet held back by structural constraints. Insurers are focusing on underwriting, AI and workflow automation to enhance efficiency and pricing, while claims transformation attracts less priority despite its relevance for profitability and trust. AI adoption is widespread but largely experimental, with legacy systems and data quality — not cultural resistance — cited as the main barriers. Overall, the results point to a preference for incremental optimisation over fundamental system renewal.

Based on responses from a broad reinsurance and insurance ecosystem — with a strong bias toward insurers — the results highlight that digital transformation efforts are currently driven primarily by efficiency gains and pricing initiatives. More than one third of insurers identify underwriting as their top digital priority, well ahead of claims and finance functions. This focus reflects the central role of underwriting quality and speed in a competitive marine insurance market, where disciplined risk selection directly influences top-line performance.

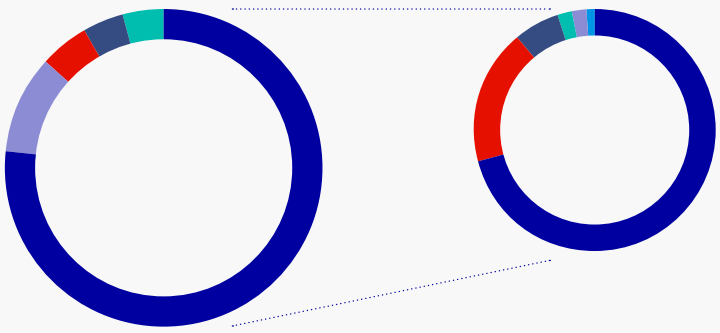
The comparatively modest emphasis on claims transformation stands out. This may indicate that the operational and strategic potential within claims processes is not yet fully exploited. While underwriting determines premium income, it is the effectiveness of claims handling that ultimately shapes technical results and policyholder confidence. In contrast, HR and marketing continue to rank as secondary areas for digital investment.

When looking at initiatives already underway, AI implementation, workflow automation and customer-facing portals form the most common combination. Interestingly, modernising core production systems ranks only third overall, although it remains a top initiative among insurers. This suggests that many organisations prefer incremental efficiency improvements over fundamental system replacement, despite long-term dependencies on legacy infrastructure.

31%

Only 31% of respondents use AI in their daily work

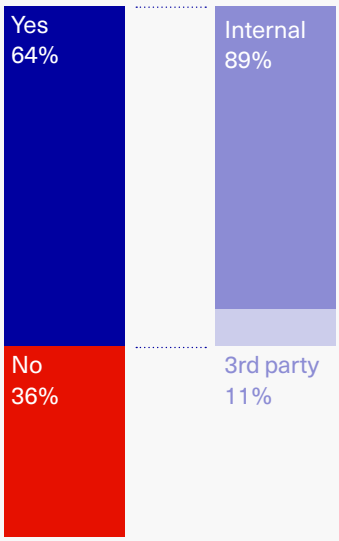
Figure 1
Respondents
The largest group were Major Insurance Companies and the majority were providers of multi-lines of business.



Marine insurance company	76%
Reinsurance and insurance ecosystem stakeholders	10%
Marine surveyor	5%
Marine broker	4%
Marine lawyer	4%

Multi LoB-providers	71%
Cargo insurance	18%
Hull insurance	6%
Energy insurance	2%
War risk insurance	2%
Marine liabilities (fixed or mutual P&I)	1%

Figure 2
AI and digital transformation
64% of companies have a dedicated internal team and rely heavily on their own capabilities for AI and digital transformation.



IUMI survey uncovers marine insurance's incremental path to transformation
Continued

At the same time, legacy systems and insufficient data quality are frequently cited as key obstacles to effective AI deployment. The fact that core system modernisation does not top the priority list reinforces the impression that firms are opting for step-by-step optimisation rather than structural transformation. In other words, technological ambition appears to be advancing faster than the underlying system architecture that would sustainably support it.

AI adoption is widespread, yet still shallow. While a majority of respondents use AI tools in some form, only 31% report use beyond experimental purposes. Companies rely heavily on internal capabilities to drive transformation, raising questions about whether in-house resources alone will be sufficient as complexity increases.

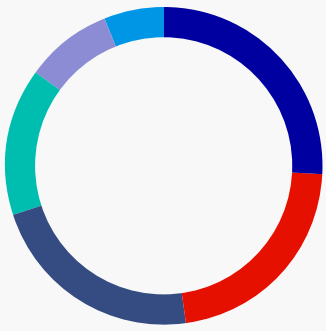
The main barriers to AI adoption are not training or employee resistance but legacy systems and data quality. This stands in contrast to other industries where workforce scepticism is often cited as a key obstacle. In marine insurance, employees appear largely receptive to new technologies. Given that training and employee resistance do not emerge as leading barriers, the constraint appears less cultural and more architectural. AI adoption may therefore be heavily reliant on system modernisation and data quality improvement.

Self-assessed digital maturity averages 2.79 on a five-point scale, indicating a slightly above-average perception that may mask uneven progress. Operational efficiency dominates success measurement, with KPIs such as expense ratios, processing times and error rates emerging as natural candidates for deeper follow-up analysis.

16%

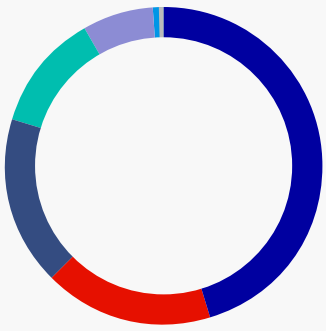
While 16% of respondents believe in their evolved and advanced AI skills

Figure 3
Barriers to adopting AI



Data quality and availability issues	26%
Integration with existing systems	22%
Lack of AI competence	22%
Regulatory and compliance	22%
Return on investment or budget issues	9%
Internal resistance	6%

Figure 4
How companies measure success of their digital transformation initiatives



Operational efficiency	45%
Do not measure	17%
Customer satisfaction	17%
ROI	12%
Market share	7%
Difficult to measure at this point	1%
Not sure	1%

Court decision: Seaworthiness starts with the crew

William Gidman
Partner

Marianna Moysiadi
Associate

HFW LLP
IUMI Professional Partner
hfw.com

The Admiralty Court's decision in The Happy Aras [2026] EWHC 7 (Admlty) provided an important reminder: a competent crew is an integral component of a vessel's seaworthiness.

The decision
The "Happy Aras" grounded off the Turkish coast laden with soya beans. In the hours leading up to the grounding, the vessel's Master committed a series of systemic failures in the navigation of the vessel, including his failure to keep a proper lookout and follow the passage plan.

In the owners' claim against the cargo insurers for General Average contribution, the court found that the vessel was manned by an incompetent Master and therefore unseaworthy.

In doing so, the court made observations about the meaning of incompetence. It highlighted that:

(a) incompetence is distinguished from negligence. A Master taking one, or even a series, of negligent actions is not necessarily incompetent.

(b) incompetence is a question of fact and may be evidenced by lack of skill, ability or training, physical or mental incapacity, or even unwillingness to perform duties.

(c) a finding of incompetence may derive from either general or specific incompetence. A generally competent Master may be incompetent in the circumstances of a specific voyage or vessel, if they lack relevant training, knowledge, experience or instructions.

The court further found that the owners had not exercised due diligence to ensure the Master's competence. It reiterated that ensuring the competence of the crew is not an exercise of collating documentary evidence of qualifications, experience and recommendations, but a continuous exercise of supervision, checks and training.

What does this mean in practice?
The decision serves as a reminder that owners may be in breach of the seaworthiness warranty, in contracts of carriage or under P&I and H&M insurance policies, if the owners fail to ensure that the crew is equipped with appropriate skill, knowledge and guidance.

HFW has been involved in several recent examples where the Master's and crew's failures have led to casualties, resulting in claims from charterers and the insurer's reservation of cover.

Owners and their insurers may therefore be exposed to liabilities, especially where their vessels undertake unusual or higher risk voyages or carry unfamiliar cargoes, unless they can demonstrate that the Master and crew have received sufficient guidance and training on, or have experience with, the specific cargo or carriage.

For a detailed analysis, see HFW's full briefing here.

Winter meeting 2026

The work of IUMI continues to an established schedule which includes the annual winter meeting in London each February. This year, members of the Executive Committee and Chairs of the Technical Committees, Forums and Working Group gathered with the Secretariat for a two-day meeting hosted by the International Underwriting Association.

As ever, discussion topics were varied and numerous and covered IUMI strategy and progress made towards the 2030 ambitions. Updates were received on a number of initiatives including our learning programme and our ESG activities. Policy engagement was discussed as were global insurance events in general. The meeting served as the scene-setter for the current year and a focus for IUMI's committees to swap notes and align their workloads.

The meeting concluded with a press conference for around 15 journalists representing international shipping and insurance publications. Topics discussed included the geopolitical situation, war risks/hotspots, a market update, fake carriers and the grey wave. Our comments were widely reported across the media.

Recent developments in English law

Maria Borg Barthet
Director and Alexander Ferrigno

Alexander Ferrigno
Senior Associate

Campbell Johnston Clark
IUMI Professional Partner
cjclaw.com

There have recently been notable developments in English law that will be of interest to marine insurers, including the High Court's consideration of the Hague-Visby Rules in the *"Taikoo Brilliance"* [2025] EWHC 1878 (Comm), the interpretation of crude oil contract terms in *Mercuria Energy Trading SA v Onex DMCC* [2026] EWHC 130 (Comm), and a new power for arbitral tribunals to make awards on a summary basis under the Arbitration Act 2025.

The *"Taikoo Brilliance"*

On appeal by owners and bill of lading holders from an arbitration award for cargo misdelivery, the High Court considered two points of law in respect of the Hague-Visby Rules: whether security proceedings could be considered a "suit" for interrupting the time bar, and the level of detail required to be stated on a bill of lading for cargo to be exempted from the Rules under Article I(c) (deck cargo exclusion).

The Court held that the holders' security proceedings issued in Singapore had not been brought to decide the claim, so could not be considered a "suit" for the purposes of the time bar at Article III(6). As to the second issue, the Court held that owners' requirement for a precise definition of the cargo was asking for too much; the wording on the bill will vary depending on the nature of cargo.

Mercuria Energy Trading v Onex

Buyers claimed damages for contaminated Iraqi oil. The contract incorporated the BP General Terms & Conditions.

Buyers argued the Sellers failed to deliver cargo *'in line with'* the typical Organic Chloride content stated in the contract, where *'in line with'* amounted to a warranty. Sellers argued the definition of *'typicals'* had to be construed against the BP GTC's definition i.e., product qualities were given without guarantee.

The Court agreed with the Sellers; the contract should be construed as a whole. The recap terms and the BP GTC terms made up the same contract. Following *"The Nounou",* the terms could be read together to give effect to both.

Arbitration Act 2025

Having come into force on 1 August 2025, the Act introduced important amendments to the Arbitration Act 1996, including section 39A, which confers power on tribunals to make an award on a summary basis (in circumstances where a claim may have no real prospect of success).

The power has tactical implications for arbitrations subject to the Act, as parties may be encouraged to settle "weak" claims rather than progress proceedings.

Annual conference 2026 Rotterdam

This year's annual conference is planned for Rotterdam 20–23 September and is hosted by the Dutch Association of Insurers.

As ever, the three-day event will be a lively mix of workshops and social events taking place under the recently announced common theme of *"Anchoring Trust in a Contested World"*. Within the current unsettled political and economic climate it is important that marine insurers continue to retain the trust of their clients and deliver products that de-risk and facilitate their business activities. Our revitalised conference programme includes two "topic" workshops which, this year, will be *"War Challenges for Marine Insurance"* and *"Logistics and Trade"*.

We are delighted that Rotterdam will be our backdrop — it is home to Europe's largest seaport and stands as one of the world's most vital gateways for international trade and maritime commerce. The city is home to a thriving maritime ecosystem with shipping companies, brokers, insurers, and a broad range of service providers who play a central role in international trade and risk management. Known as a hub of innovation and sustainability, Rotterdam is not only steeped in maritime tradition but also leading the way in shaping the future of the global maritime industry.

We look forward to welcoming you to Rotterdam and please visit www.iumi2026.com for further information.

Conference registration will open towards the end of March.

Q&A with Jungkun Lee

On 1 January this year, Mr Jungkun Lee was appointed Chair of the IACS Safety Panel. In this Q&A we ask Mr Lee about the Safety Panel and its relationship with marine insurers and find out a little about the man himself.

For those not familiar with the IACS Safety Panel, can you explain its primary role?

Within the IACS organisation, there are currently seven panels, each serving as a technical working group covering specific areas of classification society activities.

Within this structure, the Safety Panel is responsible for addressing all technical matters, other than those covered by the other panels, with a particular focus on safety-related issues governed by international instruments, such as conventions and regulations developed by the IMO and the ILO.

In practice, this means supporting the consistent interpretation and application of international safety requirements across the classification system, while identifying and addressing emerging safety concerns affecting the global fleet.

What does being Chair of the Safety Panel involve?

The role of Chair is to ensure that technical issues raised both within and outside IACS are effectively addressed through the panel framework. This includes coordinating panel discussions, overseeing the development, maintenance and revision of IACS Resolutions, leading the preparation and submission of technical documents to the IMO and reviewing and responding to agenda items of the IMO Maritime Safety Committee (MSC) and its relevant Sub-Committees.

An important part of the role is also to help prioritise issues, ensure technical consistency across Members and support the development of practical, implementable outcomes.

In addition, two panel meetings are convened each year to facilitate in-depth, face-to-face technical discussions among Members on complex matters that cannot be adequately addressed through correspondence alone.

What is top of the Safety Panel's current agenda?

The Safety Panel is currently addressing a number of priority issues.

In particular, long-standing Port State Control concerns related to the arrangement of escape trunks in machinery spaces have been a key area of focus, alongside the submission of relevant IACS Unified Interpretations to the IMO and the associated approval processes by Administrations.

These issues are significant because they directly affect compliance outcomes and operational consistency across different jurisdictions.

In addition, fire safety measures for container ships, which are also being addressed in depth within the Sub-Committee on Ship Systems and Equipment (SSE), constitute another major agenda item for the panel.

What impact has the Safety Panel had on international shipping in recent years?

The panel has consistently sought to identify challenges and issues raised by a wide range of stakeholders across the global maritime industry and to provide timely and appropriate assistance and solutions where needed. Such efforts have included responding to individual technical queries, developing and issuing IACS Unified Interpretations or Recommendations, and raising issues through the IMO with the objective of achieving meaningful and practical outcomes.

Although much of this work takes place outside the public spotlight, the panel continues to work diligently in support of maritime stakeholders facing safety-related challenges.

Can you explain the relationship between the Safety Panel and marine insurers?

While both our panel and insurers address the common theme of "safety," they do so from slightly different perspectives. Insurers naturally take safety into account; however, their ultimate objective is the reduction of accidents by improving the safety of the insured interests (for example, the hull or cargo), thereby minimising the occurrence of insurance claims.

→

Q&A with Jungkun Lee
Continued

However, the IACS Safety Panel is required to receive and consider safety-related inputs not only from insurers, but also from governments, shipowners, shipyards, seafarers, and manufacturers of shipboard equipment. In doing so, the panel must take into account a broad range of causes and impacts when considering appropriate solutions.

Nevertheless, based on their experience and statistical data, insurers play an important role at the forefront of maritime safety as early identifiers of specific areas of deficiency, providing valuable input that helps guide the IACS Safety Panel's attention towards issues that warrant consideration and resolution.

On a personal level, how did your career take you to an involvement with the IACS Safety Panel and why do you do it?

In my twenties, I served for several years as a deck officer in the merchant fleet. At that time, I was very much a follower, required to comply with and adhere to numerous safety regulations.

Subsequently, after joining KR, I have spent almost twenty-five years in the role of an implementer: interpreting safety-related regulations and developing guidance for their practical application, in support of both our clients and surveyors.

Building on these experiences, I now feel that I have been given a truly significant and much-appreciated opportunity to move beyond the stages of being merely a follower or an implementer of safety rules. Through the IACS Safety Panel, I am now able to contribute to more in-depth and strategic work for the IACS as a whole, including the planning, coordination, review and reassessment of safety regulations embodied in classification rules and international conventions, as well as to engage in important activities aimed at understanding and meeting the expectations of IACS's internal and external stakeholders.

What do you like to do away from the office?

I'm something of a homebody. I usually enjoy watching films or reading books at home, and I also enjoy taking walks, sometimes simply switching off and letting my thoughts settle.

Until a few years ago, I enjoyed building scale models of cars, aircraft, ships and even robots. However, as my eyesight has declined, I now find myself losing tiny parts while cutting them and not being able to find them again, so I have mostly stopped.

IUMI perspectives from the India Marine Conclave 2025

Hendrike Kühl
IUMI Policy Director

On 9–10 December, the General Insurance Council and the National Insurance Academy hosted the 2025 India Marine Conclave on the NIA's beautiful campus in Pune, also known as "The Oxford of the East" due to the many academic institutions which are based there.

Under the theme "Navigating the Waves of Change: Exploring Marine Insurance Frontiers" the conference brought together marine insurance thought leaders, practitioners and innovators from India and abroad. The sessions looked at global dynamics, with IUMI Secretary General Lars Lange setting the tone through his address on geopolitics, emerging technologies and sustainability trends that are reshaping the sector.

Discussions on contract certainty, underwriting challenges, war and strikes as well as dedicated case studies on pharmaceuticals and bulk cargoes added in-depth insights. The lively exchanges between the expert speakers and participants were particularly engaging and instructive. The panel on market headwinds moderated by Sanjiv Singh, former Chair of IUMI's Education Forum, brought together experts from India, allowing debate and exchanges on the evolving marine insurance landscape in India. It was also great to see IUMI Technical Committee members Bharat Virmani and Sujoy Maitra present and participate in the programme.

Forward-looking sessions on AI, digital standards and new approaches to risk management highlighted how technology and innovation are redefining marine insurance. IUMI Executive Committee member Tom Shinya contributed two presentations to this important section of the Conclave's agenda. Hendrike Kühl discussed IUMI's advocacy efforts to improve fire safety onboard containerships and to enable the safe carriage of electric vehicles.

The event was an excellent example of how collaboration and knowledge-sharing can enhance the marine insurance community. Thank you to our hosts from GIC and NIA, particularly Sibesh Sen and Jayashree Shridar, for enabling IUMI to be part of the programme and to learn about the growing Indian marine insurance market.

IUMI Masterclass comes to Asia

Hendrike Kühl
IUMI Policy Director

Since 2023, IUMI has hosted six Masterclasses in Cargo Insurance and one in Hull Insurance. Each time, I have been excited and a bit nervous because each time the courses have been different. The group of students varies hugely with participants coming from different parts of the planet. Will everyone be open-minded and happy to engage in discussion? Will we have lively exchanges and group work rather than a "one-way street" talk from the instructors? Will there be good banter among the participants and will there be some fun along the way?

Of course, our tutors have been briefed to make their sessions as lively and interactive as possible, but as Christopher Hesselbrandt, IUMI's Education Forum Chair likes to say: "it takes two to tango". Hence, it is also our instructors who are a little nervous prior to their sessions as we all hope for a dynamic and fun-filled three-and-a-half days. So far, we have been rewarded by wonderful groups of international students who were more than willing to get stuck in.

The next Masterclass is extra-special because it will be our first one to be held in Asia. Given Singapore's role as an influential maritime hub, our Education Forum quickly agreed that this would be the place to host our first Asian Masterclass. We are thrilled to have an excellent group of experts to teach and engage with our participants. The instructors are a combination of marine insurance practitioners, maritime lawyers and surveyors from our IUMI Professional Partners. Naturally, they will aim at making this an interactive experience where we will all learn from the tutors as well as from each student's experience of their own individual cargo markets.

The programme will be spiced up by networking events and a visit to the Port of Singapore Innovation Centre. And I can reveal that, once again, I am excited and a bit nervous about hosting this first-time Masterclass in Singapore... but I know it will be great!

A few seats are still available, so if you would like to join us this April, find out more here.

Looking forward to seeing you there!

New members joining our Technical Committees

We welcome the following new members to our Technical Committees. We wish them a fruitful and rewarding time and thank them for their commitment to IUMI. If you are thinking about joining an IUMI Committee, Forum or Working Group, please contact the Secretariat for more information.

Ocean Hull

Louis Gehrig, Ascot, USA

Olav Hausvik, Norwegian Hull Club, Norway

Tord Nilsson, The Swedish Club, Sweden

Yue Chi, China Continent Property & Casualty Insurance Co. Ltd, China (Junior Member)

Offshore Energy

Rui Suzuki, Mitsui Sumitomo Insurance Co Ltd, Japan

Jayati Roy, The New India Assurance Company Ltd, India

Loss Prevention Committee

Timothy Kennedy, Starr Marine, USA

Cai Yanyan, China Pacific Property Insurance Co. Ltd, China

Andrew Walker, AIG, South Africa

Jarek, Klimczak, AXA XL, UK

Tiina Ruhland, EIMC, USA

IFY Committee

Dylan James Mercante, The Hartford, USA (Junior Member)

Legal & Liability Committee

Pan (Perry) Yuwen, PICC Property & Casualty Insurance Co. Ltd, China (Junior Member)

Cargo insurance tutorial programme

IUMI's online cargo tutorial consists of eleven engaging and interactive modules specifically designed to widen your knowledge of cargo insurance. This flexible, self-paced learning programme works to your schedule and can be completed to each individual's timeframe. Topics include international trade 101; coverage for particular average and sue and labour, general average and salvage, exclusions, and many more. The cargo tutorial is CPD certified with 23 hours.

Fees

EUR 550.00 — IUMI members
EUR 880.00 — non-members

Candidates who successfully pass the IUMI cargo exam are invited to apply for two partial IUMI bursaries to take the renowned WMU's Marine Insurance Law & Practice Postgraduate Diploma programme. They can also apply for a free seat at IUMI 2026 in Rotterdam.

Register for IUMI Cargo tutorial

Hull insurance tutorial programme

IUMI's hull insurance online tutorial is designed to widen the students' knowledge and expertise in hull insurance. This extensive programme consists of a total of thirteen modules. Topics include Ships 101; Collision Liability; General Average and Salvage; Exclusions; Claims; and many more. The hull tutorial is CPD certified with 30 hours.

Fees

EUR 650.00 — IUMI members
EUR 1,040.00 — non-members

Candidates who successfully pass the IUMI hull exam are invited to apply for two partial IUMI bursaries to take the renowned WMU's Marine Insurance Law & Practice Postgraduate Diploma programme. They can also apply for a free seat at IUMI 2026 in Rotterdam.

Register for IUMI Hull tutorial

IUMI

CPD MEMBER
The CPD Certification Service

Yoshan Ekanayake

Lily Agyemang

Jing Xiao

Hull and Cargo Tutorial successes

Our online learning tutorials are tailored specifically for intermediate level underwriters and claims professionals who wish to deepen their knowledge and expertise in insurance. The hull and cargo courses consist of a number of interactive modules designed as a self-paced, online training programme culminating in an optional examination.

Congratulations to the following students who successfully passed the exam in December 2025.

Cargo

Yoshan Ekanayake, IAG, New Zealand (with Distinction)

Lily Agyemang, RSA Group, Belgium

Jing Xiao, Wesmans, Sweden

Jiahao Li, China

Hull

Lamprini Stavraka, Hellenic Hull Management, Cyprus

Maiko Ogawa, Sompo, Japan

Learn more about our tutorial programme here.

ALSUM —
an IUMI member association

Measuring port accumulations: A strategic tool for marine risk management in Latin America

Gabriel Villalobos
Technical Manager, ALSUM

The expansion of foreign trade in Latin America has significantly increased cargo values concentrated in major ports, raising a critical underwriting question: how much insured value is simultaneously exposed within these infrastructures under normal and disrupted conditions?

Ports are vulnerable to operational interruptions such as labour strikes, access constraints, congestion, and system failures, all of which extend cargo dwell time and amplify accumulation risk. Traditional approaches based on aerial imagery or 3D models allow visualisation of physical volumes but fail to quantify the economic value of stored goods. For marine insurers and reinsurers, exposure depends on monetary value, not physical space.

A more robust approach applies a fundamental logistics principle formalised in Little's Law: inventory equals flow multiplied by dwell time. Based on this concept, a structured three-stage methodology is proposed.

Methodological framework

1. Identification of peak flow month

For each port, the month with the highest combined import and export value during the year is selected, representing maximum operational pressure. Data may be sourced from customs authorities or port administrations.

2. Determination of average dwell time

Average cargo permanence is obtained from port authorities, customs agencies, or international benchmarks such as the World Bank's Logistics Performance Index (LPI).

3. Estimation of simultaneous inventory

The exposed value is calculated by multiplying peak flow by dwell time, incorporating disruption adjustments:

Total Inventory = $\sum(F_i \times (T_i + T_{interruption,j}))$

Where:

Fi = Monthly value handled by cargo type i

Ti = Average dwell time by cargo type i

Tinterruption,j = Additional disruption time by risk type j

Total Inventory = Estimated simultaneous exposed value

This structure allows scenario modelling by cargo type and disruption category.

Empirical application

Applying this methodology to Colombia using proprietary calculations indicates that, under normal conditions, the two main ports concentrate between USD 580–660 million in exposed cargo, excluding hydrocarbons and coal. Under moderate congestion, exposure increases by more than 12.5% per additional day. A 10-day disruption may elevate accumulations to approximately 2.25 times baseline exposure.

Note: Import and export flows were derived from DIAN foreign trade statistical databases (2026), processed in Microsoft Excel using Power Query, consolidating annual FOB and CIF values and excluding oil and coal.

Advantages and limitations

The methodology is theory-based, transparent, replicable, and comparable across ports. It relies primarily on publicly available data and supports scenario development for probable maximum loss (PML) modelling. It also enhances dialogue between insurers, reinsurers, and supervisors.

However, it does not capture extreme short-term peaks or intramonth volatility. Therefore, it should be interpreted as a structured estimation rather than an absolute measurement.

Strategic implications

By interpreting cargo flows as inventories, dispersed trade statistics become actionable underwriting intelligence. In a context of increasing operational and climate volatility, systematic measurement of port accumulations is essential for strengthening marine insurance sustainability and reinsurance placement strategies in Latin America.

IUMI podcast series

IUMI

ALSUM and the Latin American marine insurance market

In December we were delighted to welcome the Latin American Association of Marine Insurance (ALSUM) as a full IUMI member. Their membership greatly enriches the IUMI community and will facilitate access to the Latin American marine insurance market giving mutual opportunities for knowledge sharing, education and networking.

In this podcast, our Secretary General, Lars Lange, welcomes ALSUM and discusses future synergies with ALSUM President Arturo Posada. We also learn about the characteristics of the Latin American market and their ambitions for the future.

This fascinating podcast gives a unique insight into a growing and exciting marine insurance market.

Listen here.

Hegemony, violence and marine insurance

Hegemony and violence are two strong words loaded with meaning. It's not often they are connected with the world of marine insurance. But in his recent book, award winning author Tom Shinya charts the evolution of marine insurance from its origins to the present day and explains how its formative years were entwined in conflict, war and the race for global power.

Aside from writing, Tom is well known as a Senior Expert in the Marine Underwriting Department at Tokio Marine & Nichido Fire Insurance Co Ltd and he is also an IUMI Executive Committee Member.

Tom is the guest in our latest podcast where he explains more about the fascinating growth and development of marine insurance. He brings to life some of the lesser known influences on our industry.

Listen here

Imprint

International Union of Marine Insurance
Grosse Elbstrasse 36
D-22767 Hamburg, Germany
Telephone +49 40 2000 747-0
Email info@iumi.com

iumi.com

Editorial team
Hendrike Kühl, Corinna Wintjen, IUMI, Hamburg
Mike Elsom, London

Design
Keller Maurer Design, Munich