

BULK TERMINALS ANTWERP 2024: CONFERENCE ROUND-UP

The much-anticipated Bulk Terminals Antwerp 2024 conference was a resounding success, full of insight on a far-reaching range of subjects and thoughtful opinion from industry experts – as well as plenty of opportunities for networking.

The event opened with a warm welcome from **ABTO Chief Executive Simon Gutteridge**, expressing thanks to the sponsors for their support and welcoming delegates old and new. Then it was over to conference chair **Professor Mike Bradley from the Wolfson Centre for Bulk Solids Handling Technology**. He highlighted the significance of dry bulk – without which no goods would exist – and emphasised the importance of health and safety within the industry.

Jo Van der Herten, Key Account Manager, Port of Antwerp-Bruges Bulk Terminals gave an introduction to the Port of Antwerp-Bruges, explaining how the port encourages growth within the region, but also works to ensure that the port is fully integrated with the surrounding community.

There was then a series of insightful sessions on bulk markets, chaired by **Rahul Sharan, Deputy Director – Bulk Research, Drewry**, who introduced **Dr Wouter Jacobs, Executive and Academic Director Erasmus Commodity and Trade Centre, Erasmus University Rotterdam**. Dr Jacobs spoke on the topic of bulk markets' vulnerability to wars and political disruptions, highlighting 'VUCA' – volatility, uncertainty, complexity and ambiguity.

He discussed the impact of war and geopolitics on the availability of commodities, pointing out the effect of maritime choke points such as the Panama and Suez canals, and the Red Sea. He also highlighted tension around Taiwan, showing the areas of Chinese military operations. Moving from geopolitics to geoeconomics, Dr Jacobs then looked at how the drive to decarbonise is currently affecting markets: "This leads to a 'trilemma' of security, affordability and sustainability, which in turn becomes a political problem," he said.

One example he discussed was the amassing of critical raw materials, such as China's purchasing of cobalt. Sharan then gave a presentation on major bulk trades, *Continued...*

EASEMENT EXTENDED ON FRUIT AND VEGETABLES

The UK Chamber of Shipping has highlighted the recent decision by the UK government to extend the easement of import checks on medium-risk fruit and vegetables imported from the EU from January 2025 to 1 July 2025.

Such products will not be subject to import checks at the GB border or charged the associated fees until this date.

This easement is a temporary measure to ensure that new ministers have a full and thorough opportunity to review the planned implementation of further border controls, and an opportunity to listen to businesses across import supply chains.

Defra has also changed the risk categorisation of certain plants and plant products, including deregulation of certain products, following further scientific review of commodities across all plant and plant product risk categories.

Seven commodity groups (including apples and pears) will be recategorised from medium risk to low risk, allowing these goods to move freely into GB from the EU, Switzerland and Liechtenstein.

These changes will come into force on 30 January 2025.

Defra will continue the systematic, proactive screening of potential new and emerging biosecurity risks. This is alongside maintaining its responsive approach to changes in risk levels via surveillance, enhanced inspection, regulation, import controls, research and awareness raising.

highlighting the fact that the two biggest trade routes are Australia to China and Brazil to China. “China contributes nearly 45% to the major bulk imports, playing the most significant role in the total dry bulk trade, with its role remaining equally crucial in the coming five years,” he said.

The anticipated decline in demand for iron ore due to the increased use of electric arc furnaces to produce steel from recycled steel has not materialised because the demand for steel has increased more than anticipated, he explained. China has now started to import coking coal from Mongolia since the opening of a new railway between the two countries. This has reduced the amount of coking coal that China imports from Australia and so reduced the demand for seaborne trade. Shifting the focus to grain **Professor Indra Vonck, Partner, Maritime and Transport Business Solutions (MTBS) and Vrije Universiteit Brussels** told the meeting that the fundamentals for the grain trade remain strong.

“Economic growth is steady, with inflation declining and commodity prices falling along with demographic growth and with technological change relatively stable,” he said. As far as seaborne trade is concerned, he predicted that there will be an undersupply of vessels during 2024, which will maintain the freight rates. However, he said, 2025 will see an oversupply of shipping, which could result in a downward pressure on the market.

He also pointed out that Brazil has for the past couple of years become the largest supplier of grain after years of the United States being the dominant supplier. There followed an overview of biomass by **Gilles Gauthier, Research and Business Development Manager, Hawkins Wright**, who explained the various types of biomass that are transported by sea, from lignocellulosic (wood) biomass and agribiomass, and include firewood, wood briquettes, wood pellets and wood chips. The primary use for all these different forms of biomass is the generation of power and, increasingly, on the domestic market for heating.

The session concluded with a presentation by Rahul Sharan on an overview of minor bulks – waste, fly ash and aggregates. He explained how the dry bulk market saw a supercycle between 2004 and 2008, which resulted in an overbuilding of vessels leading to depressed freight rates for the next decade. Nearly 20% of dry bulk Handysize and Handymax vessels were estimated to have a Carbon Intensity Indicator ‘E’ rating – the lowest – in 2023.

These vessels will be required to undergo retrofitting of energy-saving devices and/or propulsion improvement devices and/or voyage optimisation or switch to low-zero carbon alternative fuel. The solution can potentially be a combination of different options, Sharan said, although some of the vessels may have to be scrapped as the retrofits may be uneconomic depending on the charter market conditions. The

speakers then answered questions from the audience, with a great deal of interest being shown in the issues surrounding biomass, with also plenty of discussion on the geo-political situation in the Middle East and Ukraine.



After lunch, the conference moved on to a session on operations. Progress towards bulk terminal automation was presented by **Nick Chubb, Managing Director, Thetius**. “The key challenges terminals face today include manual processes and recordkeeping, the absence of automation and standardisation, a lack of system integration and cyber security,” he said. Together, these are hampering the digitisation process.

What is containerised bulk handling (CBH), **Frank van Laarhoven, Senior Sales Manager Europe, RAM Spreaders** asked the conference.

Traditional bulk handling systems run a high risk of material loss during the handling process, he explained. “This is not only damaging to the environment, but also money blowing in the wind,” he said. Containers prevent the loss of materials when being handled as the dust generation is greatly reduced.

Hanne Geelen, Country Manager Belgium, Igus provided a brief overview of the company, which produces high-performance polymers for movement, before **Tobias Batzdorf, Shore Power Manager** at the firm gave a presentation on latest developments in the electrification of terminal operations – cold ironing and harbour machinery.

“The movement towards supplying shore power is driven by concerns about health, specifically particulate matter (PM) produced by ships auxiliary generators running when in port,” he said. The use of shore power helps to reduce PM and reduces greenhouse gas emissions and noise both above and below the waterline. While there exist standards for the provision of shore supply to container vessels, passenger ships and roro pure car and truck carriers, there is not standard for dry bulk terminals at present, he explained.

An interesting case study followed on Glencore terminal application of radar technology, by **Dr Christian**



Augustin LLM, Managing Director, indurad GmbH. He explained how the radar technology can see through dust and suppressant mist, demonstrated using a video to show the technology in action. He also gave examples of where collision avoidance technology resulted in better operational performance and demonstrated how all these technologies have been combined in use at the Glencore facility. The day's proceedings finished with a general discussion on the circular economy, with panellists **Michael Akkermans, Commercial Manager Port Operations, Katoen Natie; Yves Bosteels, General Manager Dry Bulk Division, SEA-invest and Kris Dhondt, Commercial Director Belgium, Euroports Belgium NV.**

A lively evening reception took place at De Koninck Antwerp City Brewery, which was preceded with a tour of the brewery.

Day two began by turning the focus on the environment, opening with a session on developments in maritime decarbonisation and getting ports to net zero, by Nick Chubb of Thetius. He provided a framework for decarbonisation, emphasising the need to plan the process thoroughly and ensure that the low-hanging fruit are the first actions taken. "Detect the source(s) of emissions," he said. "This is required to obtain a clear and quantifiable view of how to move forward with your emissions reduction strategy."

Continuing the sustainability theme, **David Ingvarsson, Sales Manager, BRUKS Siwertell AB,** examined environmental gains from advances in technology, highlighting ship unloading operations. "High operational efficiency means the ships can be unloaded faster," he said. "A quicker turnaround reduces berth occupancy and increases berth utilisation, as well as reducing personnel requirements."

A panel discussion followed on the options for a green port strategy, featuring **Arne Strybos, Program Manager Fuel Transition, Port of Antwerp-Bruges; Maarten Boot, Policy Advisor, FEPORT; Karin Smit Jacobs MSc, Director EU Transport and Energy, Conference of Peripheral Maritime Regions (CPMR); Tobias Batzdorf; Nick Chubb; and David Ingvarsson.**

The discussion looked to the future regarding green initiatives, with considerable time looking at future fuels for mobile equipment, with hydrogen featuring quite highly. The rest of the day turned the spotlight on cyber security, safety and risk. **Richard Hodder, CEO, Pelion Consulting,** gave an update on the latest cyber risks and what protective measures companies need to take, highlighting several of the most recent cyber attacks in the maritime industry including the one experienced by Lisbon Port. 'Mitigating evolving threats means adapting to the future, collaboration, enhanced defences and employee knowledge,' he explained.

The spotlight then turned on to risk management. Neil Dalus, Risk Assessment Manager, TT Club explained to the conference the concept of risk management and how risk can be mitigated to reduce the likelihood of it affecting a business. "The TT Club's mission is to make the global transport and logistics industry safer, more secure and more sustainable," he said.

Finally, **Richard Steele, CEO, the International Cargo Handling Coordination Association International,** looked at innovations in safety technologies. He showcased the TT Club Innovation in Safety Awards programme, which has enabled new ideas to be demonstrated.

The innovative entries spanned 15 countries and included Associated British Ports virtual reality port safety induction and training; CM Labs Simulations port equipment simulation training solutions; Euroports Group HQ, Antwerp- Belgium Line of Fire program; and Flint Systems Virtual Reality Training Simulator. The second day finished with a visit to Euroports' Fertilisers and Minerals Terminal, with a tour of the state-of-the-art facilities.

Delegates and speakers alike thoroughly enjoyed the conference. As Kristoffer Alm from Bruks Siwertell said: "The Antwerp conference was really good. Great networking opportunities", while Colin Dunn of PD Ports enjoyed the "good mix of presentations". Another port delegate thought the "industry sector experts were well received and very knowledgeable".

We look forward to seeing you in 2025.



THE WOLFSON CENTRE FOR BULK SOLIDS HANDLING TECHNOLOGY AT THE UNIVERSITY OF GREENWICH, MEDWAY.

EXPERTS OFFERING CONSULTANCY ADVICE AND SHORT COURSES FOR
ENGINEERS HANDLING POWDER AND BULK MATERIALS

»»» ONLINE COURSES NOW AVAILABLE

CONSULTANCY SERVICES

Some of our Consultancy services include advising on:

- » Storage and Discharge of bulk materials
- » Pneumatic Conveying of bulk solids
- » Spoiling of materials in storage and in transit
- » Plant and Equipment design/redesign
- » Ship Unloading/ quayside operations
- » Control of plant wear
- » Dust control
- » Bulk Materials characterisation
- » ATEX/DSEAR compliance
- » Expert Witness services

SHORT COURSES FOR INDUSTRY

We also provide a range of short courses to help delegates identify potential bulk materials handling problems and advise on how to avoid and/or overcome these issues. They fall under 4 main categories

Pneumatic Conveying:

- » Pneumatic Conveying of Bulk Materials
- » Pneumatic Conveying System Design
- » Rotary Valves; Design, Selection and Operational Issues
- » Commissioning and Troubleshooting 'Hand's On' Pneumatic Conveying Systems

Storage of Bulk Materials:

- » Storage and Discharge of Powders and Bulk Solids
- » Design of Equipment for Storing and Handling Bulk Materials
- » Biomass Handling, Feeding and Storage (can be adapted to other materials such as waste, recycled goods, pellets)

General bulk materials handling:

- » Overview of Particulate Handling Technology
- » Port and Terminal Operations for Bulk Cargoes
- » Measurement of the Properties and Bulk Behaviour of Particulate Materials
- » Dust Control in Processes

Specialist areas of concern:

- » Caking and Lump Formation in Powders and Bulk Solids
- » Undesired De-blending and Separation in Processes and Equipment
- » Electrostatics in Powder Handling
- » Numerical Modelling of Solids Handling and Processing
- » Powder Handling and Flow for Additive Manufacturing

KEEPING SEAFARERS' STRUGGLES IN THE SPOTLIGHT

Many seafarers still fear the stigma of speaking openly about their struggles while working at sea, so shipping needs to keep crew mental health and wellbeing high-up on its agenda, a leading global maritime charity has urged.

Stella Maris' **Life at Sea Report 2024** was launched on World Mental Health Day on 10 October. This year's edition focuses on the importance of mental health in the maritime industry and the role played by hundreds of Stella Maris chaplains and volunteers around the globe to support the mental wellbeing of seafarers.

"Seafarers are tough, they have to be. Being part of a small crew is inherently challenging. The work is relentless, and emotions such as loneliness, fear and boredom are difficult to endure," says Stella Maris CEO and National Director Tim Hill.

"But it can be hard for seafarers to talk about their worries. The fear of being judged or lowering morale among crew often keeps them silent. When seafarers are concerned about their families, they can feel powerless and isolated," he added.

"At Stella Maris, we believe that face-to-face interaction makes a huge difference: a friend in port; a listening ear; a welcoming smile. When you ask seafarers about life at sea, they often say they miss the feeling of being connected. Human connection is what Stella Maris chaplains provide in their tens of thousands of ship visits each year.

And when crisis strikes, the value and impact of our chaplains' support is even greater, providing a unique service to the world's seafarers wherever they are," he explained.

As with previous years, the Report features excellent case studies of how Stella Maris' support has provided a lifeline for many seafarers caught up in crises. It includes examples of Ukrainian seafarers anxious about their future and that of their families, seafarers worried about sailing through the current conflict zones of the Red Sea and the Black Sea, a case of a seafarer in emotional distress after being arrested, and a crew under enormous financial strain after not being paid for weeks.

The Report also highlights how Stella Maris' partnership with the shipping industry including P&I Clubs, shipping companies and other welfare agencies, has been vital in helping to address and solve crews' concerns.

"One of the most important things the industry can invest in is making sure seafarers continue to get caring, compassionate human contact," says clinical psychologist Charles Watkins, who is featured in the Report.

"Stella Maris has chaplains around the world, in all cultures, and they have a really good feeling for culture and what that means for mental and physical health. These small things – going on board, chatting to crews, asking about their families – they are not small at all. They are huge. I've been on board vessels with Stella Maris chaplains and have seen for myself. This is significant, impactful work," he added.

CALL TO SUBSCRIBE TO NEW DRY BULK MANAGEMENT STANDARD

Intercargo is strongly urging its members (shipowners, managers and operators) to subscribe to the newly launched Dry Bulk Management Standard (DryBMS) portal. With safety, operational efficiency, and sustainability at the forefront of the dry bulk shipping industry, active participation in this pioneering platform is essential for shaping the future of the sector.

By joining the Dry Bulk Centre of Excellence (DBCE), subscribers will have a unique opportunity to contribute to the ongoing development of the DryBMS standard, ensuring that it reflects the needs of all stakeholders. The DBCE's governance structure, which provides equal standing for shipowners, operators and charterers, allows subscribers to have a direct voice in guiding the standard forward.

Intercargo, as a founding member of the DBCE, alongside BIMCO, ICS and Rightship, believes that member involvement is key to achieving the widespread adoption of DryBMS. This collaboration aims to foster a safer, more efficient and environmentally sustainable dry bulk industry, and industry participation is critical to making this vision a reality.

To encourage subscription, Intercargo is offering an exclusive incentive: the full refund of the £1,000 initial sign-up fee to the DBCE will be credited against the 2025 Intercargo membership fee for its members subscribing to DBCE in 2024. This refund makes it even easier for Intercargo members to take part in this vital initiative and influence the future of dry bulk shipping.

The Dry Bulk Management Standard (DryBMS) portal was officially launched in August, marking a new era for safety and sustainability in the dry bulk sector. The first 20 companies have already started the process of subscribing to the DBCE.

For more information, please visit the [DBCE website](#)

BRITANNIA URGES CARE WITH MEG CARGOES

Britannia P&I Club has been looking at the safe handling of mono ethylene glycol (MEG) cargoes. The surge in demand for MEG across multiple sectors, spanning from automotive, textile to pharmaceuticals or cosmetics, has seen a proportional rise in off-spec cargo claims. It is widely used as an ingredient for production of polyethylene terephthalate (PET) resins, fibres, films or antifreeze and coolants.

For reference and as background to understanding the cargo, it is important to know that MEG is a high specification and particularly sensitive cargo. MEG is a chemically hydrophilic substance, meaning it can easily form hydrogen bonds with solvents such as water or alcohol, it also has a low freezing point. Typically, it is synthesised by reacting ethylene oxide with water and the product is practically colourless, odourless and sweet tasting with a syrupy appearance.

Therefore, the production process poses a unique challenge due to the formation of impurities such as aldehydes (by-products), which are inherently difficult to separate from MEG. Factors like production process instability or failure in process control can contribute to the presence of aldehydes, specifically formaldehyde or acetaldehyde, in MEG.

Like many other chemical cargoes, the quality of MEG cargo is susceptible to external factors such as presence of water, ultraviolet transmission (UVT), and chloride contamination. Any compromise in these aspects can significantly reduce the cargo's value, so it is essential to take precautions to ensure safe transport. MEG cargoes may require strict exclusion of water, which in turn, requires tank cleanliness to a very high-purity standard.

This protocol helps to prevent contamination by residual organic and inorganic substances within the ship's containment system, i.e., tanks, pumps, heating equipment, and pipelines. Consequently, a wall-wash survey before loading and sampling the initial 'first-foot' cargo is important.



After prolonged intervals between MEG loading at the terminal, the loading arm or hoses may sometimes be exposed to inclement weather, ie rain or sun, etc, and these lines should be flushed before loading starts. Consequently, it would be a common practice to request for manifold samples to be tested before opening up to nominated cargo tanks to ensure the cargo quality conforms to the agreed specification as per voyage instructions. The first foot sample should be tested to ensure the results are also in satisfactory condition. However, this may involve suspending the cargo operation which should be agreed amicably between all parties of interest.

Furthermore, extended exposure of MEG to the air for a prolonged period during transportation tends to deteriorate the cargo quality when dissolved oxygen reacts with the cargo in a process called oxidation (by both thermal and catalytic means). During this oxidation process, MEG reacts with oxygen or other oxidising agents to produce aldehydes (eg glycol aldehyde, glyoxal, formaldehyde, acetaldehyde) and the corresponding acids. Therefore, it may be advisable to carry out nitrogen padding in ship's cargo tanks after loading (particularly for long voyages).

The process of nitrogen padding for cargo tanks containing MEG is common to prevent or at least, avoid any further deterioration of the cargo during voyage and most charterers/shippers will require these additional steps to preserve the quality of the cargo.

In some cases, off-spec issues with MEG can be attributed to the ship not receiving proper guidance or voyage instructions from shippers and/or charterers including the handling and nitrogen padding requirements. When a owner's ship does not have this type of facility onboard, then they may seek alternative arrangement with the shippers/ charterers to address this concern and/or shore supply from the terminal.

SURVEY HIGHLIGHTS SCOURGE OF ILLEGAL RECRUITMENT FEES

New research published recently has found that almost a third of seafarers have been asked to pay illegal recruitment fees. Researchers say findings show recruitment fees are endemic, despite being illegal under the Maritime Labour Convention.

The research shows that almost a third (31%) of seafarers have been asked to pay a recruitment fee to secure a job onboard a merchant vessel – of these, 28% happened in 2024 – meaning the problem is both endemic and current. Almost half of those who were charged fees paid between \$500-\$5,000, with some seafarers reporting being charged more than \$10,000. The resulting levels of debt push many seafarers towards modern slavery conditions and are linked to unsafe conditions aboard ships, according to researchers.

Seafarers and Illegal Recruitment Fees: 2024 Insights, published on World Maritime Day, is a joint publication by The Institute for Human Rights and Business (IHRB) and TURTLE, an ethical maritime recruitment platform. It mirrors findings from 2023, showing the practice of charging recruitment fees – illegal under the Maritime Labour Convention – continues to be widespread and endemic. Recruitment fees are creating a ‘pay to play’ model, which prioritises fee-paying recruits instead of the most qualified.

This year’s survey also includes findings on the mental health impacts of recruitment fees, with almost three quarters of seafarers saying recruitment fee requests impacted their mental health.

Francesca Fairbairn, who leads IHRB’s work on shipping and commodities, says: “Recruitment fees are an injustice that no worker should face, least of all seafarers who keep goods moving around the world, often in challenging conditions. And yet, our research shows these illegal fees are endemic in shipping – and not only endemic but often exorbitant. What’s more, the financial stress they endure can lead to unsafe working conditions on board ships. Seafarers deserve better.

“Part of the problem is lack of awareness among shipping companies and cargo owners that workers pay such fees – they must ensure seafarers aboard vessels they are associated with are not victims of illegal recruitment fees.” Isabelle Rickmers, the CEO and founder of TURTLE adds: “The fact that one in three seafarers are affected, regardless of rank and nationality, is deeply concerning. We simply can no longer ignore this when we aim to move towards clean supply chains. This illegal practice prevents future talent from entering the industry – and this concerns us all”.

Seafarers interviewed for the research, whose identities have been protected, said:

“What I experienced is giving money under the table to give me a rotation/or contract by the fleet manager of the manning agency. If we don't give them, I need to wait for a long time for my next ship assignment.” (Fitter, Philippines)

“As a seafarer we already have lots of difficulties in our life. We have difficulties completing our cadet-ship and clearing the mate exams with the salary we get as a cadet. The financial difficulties and the burden to take care of our loved ones makes it emotionally more difficult than any other.”

(Deck Cadet, India)

The research found that 74% of those asked to pay a fee did so, in part due to a lack of awareness. A staggering 80% of seafarers who were asked to pay illegal recruitment fees did not report the incidents to authorities, with many unaware that this practice is illegal. Researchers say the findings call for increased awareness among all stakeholders in the industry about the illegality of these fees, and to provide clear, accessible channels for reporting such practices.

IHRB and TURTLE call for leadership and action from shipping companies, cargo owners and government agencies saying:

- Customers of shipping companies – including charterers, commodity companies and traders, and container cargo owners – have a responsibility to carry out due diligence on this issue with their shipping suppliers.
- As the payment of recruitment fees is prohibited under the Maritime Labour Convention, flag state and port state authorities of countries who have ratified the Convention are required to investigate any reports of the charging of recruitment fees.
- Home states (where crewing agencies are based) have an obligation to ensure that crewing agencies do not charge fees for jobs, and enact and enforce penalties for such practices.
- Greater efforts are needed to build awareness of the illegality of the charging of recruitment fees, among seafarers, national authorities, ship operators and cargo owners.
- Effective mechanisms are required to penalise offending agencies and to provide remedies for seafarers who have paid illegal recruitment fees, including possibly, reimbursement by employers of fees already paid.
- Seafarers need to know how and where to report such practices (e.g. port or flag state authorities, employer, crewing agency and unions). There needs to be a direct link between shipping companies and seafarers so that seafarers have a safe gateway to their employers.

TAKING A FLEXIBLE APPROACH

The International Union of Marine Insurance (IUMI) has published a best practice guide for the safe use of flexible tanks for the transport of liquid cargoes. Its objective is to provide underwriters, brokers and their clients with practical guidance to ensure cargoes transported by flexible tanks arrive intact at their chosen destination.

Flexible tanks – or flexitanks – are poly film bladders that are filled with a liquid cargo (such as dairy products, wine, fruit juice or non-dangerous oils) and then placed into a standard IOS container for transportation.

Explaining the issue, Lars Lange, Secretary General of IUMI, says: “The use of flexitanks has grown significantly in recent years mainly due to reduced transportation costs when compared with a tank container. But this method, if not correctly managed, is easily prone to damage. And once a flexitank is ruptured a total cargo loss usually occurs. This impacts not only on the insurer, the cargo owner and carrier but there is a very real risk of third-party and possible environmental impact as well.”

The paper outlines a range of potential risks, including poor stowage, incorrect installation, overloading, material deficiencies, transport issues and others. It goes on to highlight the potential impact which might include additional costs incurred over and above the loss of the cargo and consequential damage such as environmental, social and governance or third-party issues.

Recommendations for safe use and carriage are contained within the main paper and its three detailed annexes. They include:

- selection of flexitanks and containers;
- container preparation;
- installation;
- transportation; and
- emergency preparedness.

Checklists covering selection, preparation, installation and loading are also included.

Lange concludes: “One of IUMI’s central roles is to gather and share knowledge amongst the international marine insurance community to enhance the safety and efficiency of seaborne trade. These guidelines focus on a specific issue that, in our view, will benefit from a change to current practices so that liquid cargoes transported by flexitanks remain safe and free from damage. My thanks go to IUMI’s Loss Prevention Committee and our Professional Partner Battermann & Tillery for compiling such a comprehensive document.”

IUMI’s [Flexible Tanks for Liquid Bulk Cargo: Recommended Best Practice](#) paper is available for download together with the three annexes.

DATA-DRIVEN TOOLS NAVIGATE FUEL LANDSCAPE

Fuel selection will be a critical factor for shipping companies to minimise financial exposure under the FuelEU Maritime regime and compliance will depend on reliable monitoring of fuel use and emissions, says OrbitMI. The NYC-based software-as-a-service company is now providing data-driven tools to effectively navigate the complex regulation together with partner Bureau Veritas (BV).

The latest EU regulation, coming on the heels of the EU ETS, entails new operational challenges as vessel operators must carefully manage and monitor their fuel mix across voyages to optimise compliance and minimise penalties for non-compliance with greenhouse gas (GHG) intensity reduction targets.

OrbitMI CEO Ali Riaz says FuelEU “represents a significant shift in maritime regulations to drive more sustainable fuel solutions, with a whole new level of complexity for shipping operations”.

He says: “Companies trading in the EU need to understand the regulation and adapt their operations to FuelEU as the clock ticks to implementation in 2025. Success in this new regulatory environment also requires enhanced cooperation between shipowners, operators and managers.”

Riaz points out that accurate tracking, reporting and verification of fuel use and emissions will become essential for compliance under FuelEU, as well as sharing of real-time voyage data among the various stakeholders to provide visibility for optimal decision-making.

OrbitMI, with BV Marine & Offshore, has enhanced its Orbit vessel performance platform for FuelEU planning and monitoring to optimise operations, while facilitating data management and collaboration for efficient regulatory compliance. Download their FuelEU Position Paper [here](#).

The collaborative platform allows seamless communication between stakeholders to ensure decisions affecting FuelEU compliance are visible to all parties.

By providing visibility into the vessel's itinerary, position, daily fuel consumption and weather conditions, both the vessel owner and operator can avoid post-voyage surprises and take decisions that minimize or eliminate penalties.

FuelEU is intended to promote uptake of alternative fuels through a penalty system for compliance deficits calculated according to stipulated levels of GHG intensity, based on well-to-wake emissions covering the full fuel lifecycle from extraction to distribution. GHG intensity reduction targets will be progressively increased from 2% starting next year to 80% by 2050.

The regulation also introduces flexible mechanisms for pooling, banking and borrowing of compliance surpluses or deficits to facilitate compliance and thereby avoid the cost of penalties – as well as potential expulsion from trading in the EU for two consecutive years of non-compliance.

Fuel selection is therefore an all-important factor and boosting the use of biofuels is seen as the most viable

option to ease compliance in the short term. Biofuel usage can both curb exposure to penalties and generate profitable surpluses for pooling with non-compliant vessels.

The Orbit platform allows simulations to predict the impact of bunkering decisions on carbon intensity thresholds in pre-fixture planning, and thereby estimate FuelEU exposure and impact by vessel, voyage or fleet. This makes it possible to optimise routes and bunkering strategies to minimise penalties.

Operational decisions can also be monitored during voyages, with post-voyage tracking and reporting to ensure compliance, as well as generation of insights to inform future bunkering decisions.

The platform, with streamlined collection and transmission of compliance data as well as integration with existing systems like VeriSTAR Green for efficient reporting, is set for further FuelEU upgrades to be rolled out in the near future that will include new features such as pooling management.

“The complexity of new regulations demands innovative data-driven solutions that streamline compliance, optimise operations and drive sustainable practices,” Riaz concludes.

CAPESIZE CONTINUES AS POPULAR CHOICE

Investors have continued to place bets on the dry bulk market with newbuilding and second-hand activity holding up strongly into the third quarter of 2024.

In its *Q3 Dry Bulk Market report*, Maritime Strategies International estimates dry bulk newbuilding orders in the first eight months of the year at above 25m dwt, with the potential for further upside on the back of late-reported deals. And despite a slight decline in sale and purchase volumes in August's brief summer lull, second-hand bulker values remain very firm.

MSI expects just over 30m dwt of dry bulk capacity to be delivered in 2024, with the orderbook forecast to rise still further by the end of the year, driven by strong contracting activity seen so far, with 2024 totals expected to hit 34m dwt.

A notable feature of newbuild contracting activity in recent months is the persistent interest in Capesize vessels. A total of 4.4m dwt of Capesize capacity was ordered during Q2, up by a third on Q1 levels and the highest quarterly total since Q2 2021. By contrast, the relative lack of interest in new Handysize vessels has persisted, with Q2 orders just 0.16m dwt.

In the second-hand market, demand for dry bulk ships remains robust, with MSI's assessment of five-year-old Capesize prices staying above \$60m, a level not seen in almost 15 years. Prices for older ships are close to their 2022 peaks, with even 18 year old Capesizes selling for over \$20m.

Prices for younger vessels are even stronger, supported by rising newbuild markets. Year-to-date transaction volumes are nearly 25% higher than the same period in 2023. Over the past three years, newbuild and second-hand price cycles have broadly tracked each other, despite lagging behind the bulker earnings cycle. The latter has had only a marginal effect, slightly advancing the peaks and troughs of older asset values compared to younger vessels.

“A recent softening in year-over-year comparisons for both newbuild prices and vessel earnings could indicate early signs that the second hand market may follow suit,” says Plamen Natzkoff, Associate Director, Dry Bulk Commodities and Freight, MSI. “This suggests that prices may continue to rise year-over-year in the near term, albeit at a slower pace, but could start to decline within six months, implying a peak in asset prices around the end of 2024 and the beginning of 2025.”

A CONVERSATION ABOUT DRY BULK: THE PORTZONE WEBINAR SERIES BY BEUMER GROUP

The PortZone live webinar series, produced by BEUMER Group, is a knowledge resource for port and terminal professionals interested in the latest trends and innovations in dry bulk handling. Designed to address the evolving challenges of port operations, the series explores how advanced technologies and solutions can improve efficiency, safety, and sustainability.

An Open Forum for Industry Experts

Port operations are increasingly driven by the need for faster, more reliable, and environmentally conscious solutions. The PortZone community focuses on these key areas in the form of webinar-like discussions with experts from the industry on navigating industry challenges. Serving as an open forum, PortZone facilitates inspiring topics, technological advancements, and knowledge exchange among industry experts. Featuring an external guest speaker from the industry in every episode, it invites you to engage and learn from some of the brightest minds in the ports and terminals industry.

Automation: Transforming Port Operations

Automation is a major theme in PortZone webinars, offering insights into technologies transforming port operations. Past episodes have explored digitalisation in shipping to improve operational processes, collision prevention systems for equipment like ship loaders, and smart mooring technology to enhance vessel stability. The series delves into leveraging Key Performance Indicators (KPIs) such as Overall Equipment Effectiveness to optimise terminal operations. Participants learn about software solutions that optimise vessel arrival schedules, reducing wait times and increasing throughput with Just-in-Time arrivals, challenging the traditional "First Come, First Served" approach. Simulation tools for improving terminal performance and managing capacity are also highlighted, providing valuable knowledge for enhancing efficiency through automation.

Sustainability: Reducing Environmental Impact

Sustainability is another critical focus, recognising the pressure on ports to reduce environmental impact. PortZone addresses strategies for achieving net-zero fugitive dust emissions and solutions for maximising fertilizer storage capacity while minimising environmental footprint. Episodes cover the challenges and solutions for implementing shore power in dry bulk terminals and introduce tools like the Maritime Emissions Portal to reduce vessel emissions. The series is a knowledge sharing resource for best practices in dry bulk handling to enhance safety and efficiency. By engaging with these topics, industry professionals gain insights into reducing emissions, improving energy efficiency, and aligning with environmental standards – all while enhancing operational performance.

Join the Community

The PortZone live webinars emphasise education and knowledge sharing, providing actionable insights for professionals looking to enhance their port or terminal operations.

Episode 19, "Bulk Loading: Degradation & Dust Control," will explore how Cascade chute systems address common issues like material degradation and dust creation through the concept of mass flow. The session will discuss reducing the need for dust extraction equipment and enhancing loading operations, supported by real-world case studies.

Join the PortZone community and register for Episode 19 airing on Wednesday, November 27th, 2024, at 14:00 UTC: [PortZone](#)



PORTZONE

A CONVERSATION ABOUT DRY BULK

WITH
**LUKAS
PAUL**



FEATURING
SHANE BARNES
CLEVELAND CASCADES

27 NOV 2024
14:00 UTC



EPISODE 19: BULK LOADING: DEGRADATION & DUST CONTROL



motion? plastics!

... safe, reliable cable and hose management for bulk handling equipment ...



igus® offers a range of solutions to manage cables and hoses for power, data and fluid supply to bulk handling equipment. These can replace festoons, busbars and cable reels to offer reliable, fail-safe and maintenance-free solutions. Also available with condition monitoring and predictive maintenance, as well as site services and support for installation and commissioning.

www.igus.co.uk/bulkhandling

igus®.co.uk