



IUMI
International Union of
Marine Insurance



Message from the President

The IUMI 2015 Annual Conference was a huge success thanks to our 58 speakers, over 600 delegates, the hard work of IUMI's Technical Committees and Political Forum, and the remarkable organisation of GDV and the IUMI Secretariat. Our host city, Berlin, is a world-class location with a deep rooted history that was the perfect backdrop for IUMI's most anticipated event of the year.

During the conference, this year's theme, "*Technical, Financial & Human Factors – is there a new normal?*" was examined by leading marine insurers and experts, and four main challenges were highlighted for our business:

- Market environment – Our business is under increasing pressure. Margins are narrowing and profitability is falling. Even profitable niches are becoming more rare due to market transparency and competition. We have to be aware of the potential of big losses, natural disasters which occur more frequently such as the floods in Thailand and Superstorm Sandy, as well as man-made losses like *Costa Concordia* and the Tianjin port explosion which demonstrate the sheer volatility of our business.
- Value accumulation – The tragic explosion in Tianjin clearly shows the challenge of growing risk accumulation. The growth in container vessel size means there are more containers, goods and valuables at terminals and in port-side warehouses than ever before. In the past we focused on natural disaster threats which usually caused the big losses. But we should also understand and be aware of man-made accidents. We must be sure to model accumulation risks and have a clear understanding of our risk exposure.
- Oil price consequences - The collapse of the oil price is having a significant effect on the oil industry. There is a massive pressure to reduce cost and offshore projects are being cancelled or postponed in the future. Consequently this impacts the offshore energy insurers as well due to reduced risk management budgets and increased pressure on the upstream insurance market.
- Cyber and digitalisation – Insurers need to really understand the technological implications and our client's exposure to cyber risks in order to develop products that give adequate cover. The progress of digitalisation, the evolution of information and communication technology will redefine shipping and the logistic processes. Increased connectivity to satellite networks and better ship-to-ship and ship-to-shore data exchange should lead to safer and more efficient operations. Marine insurers can realise new opportunities with innovative and intelligent solutions.

These key focal points highlight that marine insurers need to have a clear understanding of our changing risk exposure in order to be in a better position to advise and meet our clients' needs.

Looking forward to 2016, IUMI will continue to raise awareness of our global association and promote its position as THE representative body for the marine insurance industry. We will continue to raise our profile and influence on the international stage. One of the key initiatives we will be focusing on next year is our education project which we will be developing further in order to encourage and nurture the next generation of insurers.

Dieter Berg, IUMI President



Cargo theft on the rise - IUMI calls for more action

By Mike Elsom, Navigate PR

Reacting to an alarming increase in cargo thefts globally, IUMI is calling for the introduction of a range of measures to help reverse this worrying trend. During the IUMI conference in Berlin, the association published a position paper which points out that cargo theft is no longer confined to high-value goods and that online trading platforms are encouraging the crime. In many incidents, cargo crimes are not single events or committed out of opportunity, but performed in a well-organised and professional manner. According to an EU/Europol study based on the Transport Asset Protection Association (TAPA) IIS figures from 2008, the annual economic damage of cargo theft in Europe amounts to EUR 8.2 bn. Although there are currently no similar studies in the Americas, Africa or Asia, IUMI believes that there is a huge negative impact in these regions also.

IUMI suggests that more needs to be done and can be incorporated with the preventative measures implemented already - including the security standards being promoted by the Transport Asset Protection Association (TAPA). Specifically IUMI urges:

- Relevant national authorities should develop and share an overview of cargo theft in their country. Based on this, they should initiate a dialogue with local insurers and other stakeholders to identify initiatives to deal with crime hotspots.
- Improve law enforcement through transnational coordination and cooperation between countries and national police forces.
- Create special police units and specialised departments of public prosecution to deal with cargo crime.
- Pay close attention to on-line platforms trading stolen cargo. Also give specific attention to cyber fraud including electronic bills of lading and permits.
- Increase police presence in public traffic areas.
- Create a network of high-security truck parks.

IUMI believes that introducing these measures would significantly reduce cargo theft by contributing to facilitate the safe and secure flow of goods within the global supply chain and increasing the safety of people working in the transport sector.

For the full IUMI position paper on cargo theft prevention please visit www.iumi.com

People at IUMI

Two New IUMI Executive Committee Vice Chairmen Elected

At the IUMI Annual Conference in Berlin, Agnes Choi and Colin Sprott were both elected as vice chairmen of the Executive Committee replacing Richard Turner (Global Director, RSA) and Mike Davies (Chief Underwriting Officer, XL Caitlin Group) who stood down having completed their set term.

Agnes Choi

Agnes Choi is the Chief Distribution Officer, Property and Casualty for AXA, Hong Kong, specifically responsible for the development of cargo and hull insurance for AXA in the region. She was the Chairman of the Hong Kong Federation of Insurers and is currently serving as the Governing Committee member. Agnes has served on numerous other Asian and Hong Kong government committees and task forces and this year was awarded the Hong Kong Government Medal of Honour to recognise her outstanding contribution to the insurance industry in Hong Kong.

Following her election Agnes said:

"The successful organisation of the IUMI Annual Conference in 2014 showed Hong Kong's commitment and capacity in contributing to the development of the global marine insurance industry. Building on that momentum, I am honoured to join the Executive Committee of this prestigious international organisation and hope to play a more active role in various fronts including strengthening the connection between the Asian markets with IUMI."



Colin Sprott

Colin Sprott is responsible for the Global Marine Underwriting operation at Navigators Group. He began his career in the London insurance market 25 years ago at Sedgwick before moving to underwriting at AIG, and then to XL, where he held the position of CUO for global marine and offshore energy. Colin was Chairman of the Joint Liability Committee and has served on both the LMA Marine committee and also the IUMI Legal and Liability Committee.

When asked about his election and new role, Colin said:

"I am very honoured to be joining the IUMI Executive Committee. IUMI has evolved into the representative body of the marine insurance industry and is at the forefront of lobbying and working on the key issues of interest to marine insurers. At a time when our business is changing and becoming more challenging this is a very exciting time to be part of this global organisation. In this new role I aim to continue to promote the excellent work of IUMI's Technical Committees and Political Forum."



2015 IUMI statistics: Global challenges overshadow seemingly improved 2014 results

By Astrid Seltmann, Analyst/Actuary at CEFOR, and IUMI Facts and Figures Committee Vice Chairman

At the 2015 IUMI conference in Berlin, the Facts and Figures Committee gave its annual update on the macroeconomic environment and shipping market (Patrizia Kern, Chairman) and the global marine insurance market (Astrid Seltmann, Vice Chairman). Guest speaker this year was Graham L. Slack, chief economist of A.P. Møller-Mærsk.

Core messages of the Facts and Figures session were:

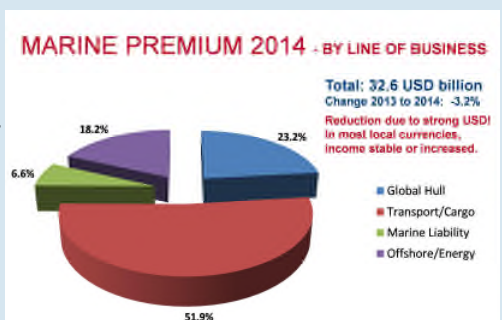
- Uncertainty seems to be the only constant!
- Threat of global financial risks adds to the instability of market environment.
- Vulnerabilities: potential growth, China, freight rate pressure, supply demand imbalance.
- Shipping industry response: lower unit costs, bigger ships, alliances and network efficiencies.
- Oversupply the common thread. Cost control the common response. Profitable growth requires bold moves.
- A Strong US dollar influences 2014 figures: The total global marine premium decreased from 33.7 USD billion in 2013 to 32.6 in 2014, due to the strengthening of the US dollar against nearly all currencies. In local currencies, many markets showed growth.
- Extraordinary absence of major losses rendered seemingly improved results for 2014. This trend had already broken by the time of the conference, with an increase in the number of total and major losses registered in 2015.
- Drop in oil price: reduced activity and more risk kept in captives leads to increased competition in commercial insurance market.
- Increasing value accumulation (ports, larger high-value vessels) and accordingly increased potential for new record claims (2012: Costa Concordia, Sandy storm, 2015: Tianjin explosions).
- The 2015 market environment is challenging and results expected to deteriorate again.

In addition to the conference presentations, the Facts and Figures Committee provides the marine insurance industry with up to date key indicators. The following data is available from statistics section of the IUMI website:

<http://www.iumi.com/index.php/committees/facts-a-figures-committee/statistics>

- Marine premiums by country for accounting years 2005 to 2014
- Loss ratio triangulations for cargo, hull and offshore energy.
- Fact Sheets with relevant data for the Hull, Cargo and Energy markets.
- IUMI hull repair cost index: The index was reviewed, and a 2015 update of the slightly revised original index published, together with a completely new alternative index.
- IUMI cargo index update as of 2015.
- Extensive statistics on the hull, cargo and energy markets including total and serious loss statistics, the world fleet development, the offshore energy market and economic parameters are issued each spring.

The Facts and Figures Committee is happy to receive feedback on its publications.



Container Ships:

Possible effect of fuel efficiency on lashing forces

By Olivier van der Kruijjs, Risk & Quality Manager and Marine Surveyor at BMT Surveys, www.bmtsurveys.com, IUMI Professional Partner

Were you aware that fuel saving measures can have a negative effect on the lashing forces on the containers? Olivier van der Kruijjs shares his experiences from the audits on more than one hundred container vessels last year.

The latest generation of container ships have been designed not only to increase capacity but also improve energy efficiency and environmental performance. The rise in fuel prices in combination with a continuing pressure on freight rates has forced ship owners and operators to look closely at the amount of fuel being used. This has resulted in economical steaming and other fuel efficiency measures. Fuel efficiency monitoring can be achieved by a number of ways; for example, by using computer and communication software which monitors and analyses the ship's performance and operational parameters in real time. The results of these analyses may then suggest, for example to change speed, trim and draft. The optimal trim, varies with speed, displacement, weather and underwater hull shape and can be a significant factor in saving fuel. One study suggested that fuel consumption could be reduced by as much as 5% using this technology. However, as an unwanted side effect, this fuel saving method may increase the calculated dynamic forces to the containers and lashings, possibly exceeding maximum permissible levels.



As part of its extensive range of services to the shipping industry, BMT also carries out regular inspections of container ships. A point of attention during these surveys is the requirement to review the lashing computer data and establish if there is a situation on board whereby container lashing forces are exceeded. With regard to maximum permissible forces, there are limitations resulting from the strength of the container itself. Those limitations are stipulated in ISO standards (ISO 1496). It is important to appreciate that there is no safety margin on these limits. Theoretically, a container may thus distort as soon as these force limits are exceeded. This is different for the safe working loads on the lashings, which do have a safety margin.



Usually, for the preparation of a stowage plan, stability and lashing forces are calculated. These calculations take into account the usual changes to stability as a consequence of expected fuel consumption or changes to the ballast water quantity, whilst sailing. It has become apparent that during the voyage, the ship is sometimes instructed by the owners (or the charterers) to make adjustments to improve fuel efficiency. These (unplanned) adjustments of draught and trim often at various occasions increased the GM (metacentric height) and, as a result, also the dynamic forces acting on the containers and lashings. This could lead to a situation whereby the ship left port with the calculated lashing forces being within design limits, but exceeding the limits at a later stage when the trim adjustments were made. For vessels enjoying a voyage in good weather, exceeding the designated maximum lashing forces is unlikely to result in any damaged cargo. However, if the ship was to encounter its "design motions criteria", damage to the container stacks and cargo could occur, thus as an indirect result of saving fuel.



Further developments in ship recycling

By Neil Roberts, Manager, Marine and Aviation at Lloyd's Market Association and IUMI Political Forum Member and Ocean Hull Technical Committee Secretary

Against the background of the perceived slow take-up of the Hong Kong Convention on recycling, the EU has engaged consultants to conduct a study which attempts to find a financial instrument which would incentivise ship owners to recycle their ships in an environmentally friendly way.

Several options have been proposed and examined ranging across guarantees, escrow, insurance, port levies, licencing, or a hybrid of these. Members of the IUMI Political Forum have attended three meetings where the various EU proposals were reviewed and the stakeholders asked to comment.

The original idea which directly affected insurers was to create a fund which would be attached to the ship for its life and which would respond when the vessel was recycled at an EU approved yard. A revised version would have responded only where the vessel was a CTL.

There were a number of conceptual and legal problems which were enough for insurance to be dropped from the range of potential answers. We were able to liaise with the ICS and the IG in this regard and as a result, the consultants significantly revised their thinking.

The new proposal is for a port levy and licence system which will require payments from any ship over 500gt using a European port. There remain unanswered concerns about the possible distortion of markets in ports, ship values and even recycling facilities. The complexities, administrative structure and costs of the new scheme remain considerable and several flag states expressed reservations. Some noted that the scheme could lessen the attraction of EU ports and were concerned at the lack of approved yards.

IUMI suggested that an alternative strategy might be for the EU to promote implementation of the Hong Kong convention, encourage the use of greener materials in ship construction, and support better recycling facilities.

Unmanned vessels: Not just insurers concerned

By Frédéric Denèfle, Insurance Director at CESAM & GAREX, and IUMI Legal & Liability Committee Chairman

Risk analysis has always been at the heart of the marine insurer's decision process. Shipping safety has a genuine link to the efficiency and professionalism of sailors and master mariners, and anyone in the industry would consider that a good crew is a prerequisite to a well maintained vessel fully able to face any perils at sea. This means that the most important pillar for a marine insurer regarding ship security is the quality of crew on board.

Nevertheless, the present situation reflects the fact that modern shipping is regularly challenging this traditional approach and developments in the industry are less driven with having people on board.

Since the end of World War II marine technology has extensively developed, which in turn has reduced the need and number of crew on board. Indeed, despite the ever increasing size of ships, or the innovative use of a vessel, for example an oil storage facility such as a FPSO, or the development of a huge floating dredging factory, we are witnessing a decreasing number of crew on board due to the development and advancement of smart technology. This is linked to cost reduction.

Unmanned ships are no longer just a fantasy. We have already seen a number of experiments with unmanned vessels being controlled ashore with remote control equipment, or from a sister ship sailing alongside or in close proximity to the vessel, using the same type of electronic control devices navigating as a convoy. Has the time arrived for crewless ships as we have seen recently with cars and trains?

If the answer is yes then is it only a matter for marine insurers to decide? Undoubtedly marine insurers, be it from the property or liability side, will be key decision makers, but we must see the results from the first prototype tests before any verdict can be taken (please see presentation from the President's Workshop on Unmanned Vessels – DNV GL Re-Volt from the IUMI 2015 Berlin Conference - http://www.iumi.com/images/Berlin2015/3Pressies/1609_HansAntonTvete.pdf).

Moreover, the marine insurer's decisions on unmanned vessels will follow the position adopted by the shipping community's main stakeholders, such as the shippers and/or charterers. The concept of an unmanned vessel does not fit with the traditional known approach of the shipowner's legal commitment, which is to safely man its vessel and identify the master as the central authority on board. All charter-parties and bills of lading currently used specify that the important duties on board must be fulfilled by the master and/or other crew members. Will the stakeholders be prepared to change this?

Apart from these commercial partners to shipping, what about flag state and classification societies? Will they be ready to issue new rules, regulations and laws which will recognise the preeminence of remote control technology over the immediate know-how of a crew on board?

We can't ignore or resist new technology and unmanned ships look likely to play a limited – or perhaps broader role – in the future. Once the key issues have been addressed and an international convention has been developed and ratified, then it is likely that these ships will become a reality. But there is a lot of work to be done first and IUMI will be on the forefront during these discussions.

Amendments to rules on safety regulations in the 2016 version of the Nordic Plan

By Anders W. Færden, Partner at Wikborg, Rein & Co. Advokatfirma DA, www.wr.no, IUMI Professional Partner

The rules on breach of safety regulations constitute the most important exception from cover in the Nordic Plan. A safety regulation is defined as a measure for the prevention of loss issued by public authorities, stipulated in the insurance contract, prescribed by the insurer pursuant to the insurance contract, or issued by the classification society. The 2016 version of the Nordic Plan has adopted two noteworthy amendments to the rules on breach of safety regulations:

The SOLAS Convention Chapter IX, the ISM Code, is incorporated into the national legislation of most flag states. The duty which follows from the ISM Code to develop, implement and maintain a Safety Management System (SMS) is thus clearly a safety regulation. A somewhat more difficult question is whether the individual provisions of the SMS can also be seen as safety regulations.

The 2016 version of the Commentary to the Nordic Plan confirms the previously expressed view that the instructions and procedures in the SMS do not constitute safety regulations per se. The important novelty in this context is the statement in the 2016 Commentary that a repeated breach of the individual instructions or procedures of the SMS may indicate that the SMS have in fact not been implemented, maintained or supervised by the management as prescribed in the ISM Code, and hence that such conduct, depending on the circumstances, may be considered a breach of a safety regulation.

The second amendment to the rules on safety regulations follows directly from the wording of the Nordic Plan cl. 3-22 sub-clause three, which now stipulates a duty for the assured to ensure that the SMS includes instructions and procedures for the use and monitoring of lubricating oil, cooling water and boiler feed water. This new rule constitutes a safety regulation in itself. The rule replaces the previous exclusion in cl. 12-5 (f) on liability for damage due to contamination of lubrication oil, cooling water or feed water. In the Commentary to this new rule it is stated that experience has shown that losses related to lubricating oil, cooling water and boiler feed water very often arise from erosion of sound practice at the operational level and that these matters are important in preventing not just costly damage to machinery, but also loss of propulsion and the dangers that inevitably follow from it.



WIKBORG | REIN

Containerisation – Dangerous Goods

By Nigel James, Master Mariner and Associate Director, LOC, www.loc-group.com IUMI Professional Partner

It is estimated that 2.5% of containers on westbound container ships from the Far East, and probably more on eastbound routes contain goods that are classed as dangerous by the International Maritime Dangerous Goods (IMDG) Code. On an 18,000 TEU vessel, this equates to about 450 hazardous containers.

Large quantities of dangerous goods, especially chemicals, transit the world's oceans in containers every day, so total compliance with and understanding of the IMDG Code requirements are vital to minimise incidents.

The first step should be thorough training for shore-based personnel covering their responsibilities for dangerous goods as per the IMDG Code – a requirement under the SOLAS (Safety of Life at Sea) Regulations. Secondly, it is crucial for the container operator and shipper to communicate properly to ensure correct packing and packaging of the goods, followed by proper positioning of the container on the ship. This means sharing a great deal of complex information between, shippers, shipping lines, partner lines and terminal operators.

Mis-declared and undeclared cargoes pose a real risk. Problems often start inside containers – most commonly with spontaneous heating and cross-contamination of goods. Major incidents can occur when cargoes are mis/undeclared and are positioned inappropriately, undermining application of the IMDG Segregation Table. In other cases operators can be at fault by not following stowage segregation requirements; stowing dangerous good on the vessel to a specific pattern can assist with this.

Shipping lines must ensure that stowage requirements are known and closely followed by all those involved, for example by keeping Class 3 (flammable liquids) and Class 1 (explosives) well apart. Stowage limitations and the potential problems of groupage or mixing and consolidation of cargoes must be recognised, regardless of commercial incentives.

Vessel crews must remain vigilant throughout voyages, especially where cargoes are placed near heat sources such as heated HFO (heavy fuel oil) tanks. Awareness of regulations is vital throughout the logistics chain, including the cleaning of empty containers before re-use.

Firefighting on container ships is very difficult and even if an incident is contained, ports can refuse entry to problem-stricken vessels, meaning that the overall cost of an incident is often far more than the value of the perished cargo and fire damage.

As ships grow in size, so does the risk of an incident. As a result good practice, procedures, strict compliance with the IMDG Code and intelligent co-operation are more important today than ever before.



IMO sub committee on carriage of cargoes and containers: 14th - 18th September

By Nick Gooding FCII, IUMI Alternate Officer at IMO

The CCC sub-committee met under the Chairmanship of Mr Xie Hui of China.

Three working groups were formed as follows:

- WG1 - Amendments to the IGF Code and development of guidelines for low-flashpoint fuels (IGF Code)
- WG2 - Container Safety
- WG3 - IMSBC code matters

The main points of interest for IUMI were the discussions arising from WG 3. The sub-committee considered a document from Australia explaining the results of research on the potential liquefaction of coal, investigating whether black coals are more likely to liquefy under certain shipping conditions, and to develop an improved Transport Moisture Limit (TML) testing protocol, intended for use with coal with a top size of up to 50mm, that are found more susceptible to liquefaction during shipping.

Also discussed were a number of proposals for amendments to the existing schedules. It was agreed, in principle, to classify Ammonium Nitrate based fertilizer (non-hazardous) as a group B cargo following consideration of a paper submitted by Germany. Further proposed new individual schedules were agreed, in principle, for flat glass cullet in bulk; mono-calcium-phosphate in bulk; synthetic silicon dioxide in bulk; synthetic calcium fluoride in bulk, and pig iron by-products, among others.

During the discussions on amendments to the International Maritime Dangerous Goods Code the sub-committee approved draft revised guidance on the continued use of existing IMO type portable tanks and road tank vehicles for the transport of dangerous goods. Also agreed, were draft amendments to Emergency Response Procedures for ships carrying dangerous goods and amendments to the inspection programme for cargo transport units carrying dangerous goods.

Following a proposal from Germany, improvements were agreed, in principle, for the marking for fumigated cargo transport units and cargo units containing substances presenting the risk of asphyxiation.

Amendments to the CSC 1972 (International Convention for Safe Containers) and Associated Circulars – Revised Guidelines for packing of cargo transport units

The sub-committee considered a report on the activity of the Global ACEP (approved continuous examination programme) Database, and views were expressed on issues believed to be acting as barriers to the development and global usage of the ACEP database. It was agreed that the use of the database should be encouraged but that use will continue to be non mandatory. The working group considered a draft "due diligence" checklist in identifying providers of CTU related services and a table of organisations within the supply chain involved in the process of packing cargo transport units which is the subject of a circular to be submitted to the next meeting of the Maritime Safety Committee.

Berlin conference a great success

This year's annual conference, held in Berlin, was attended by more than 600 delegates comprising IUMI members and marine insurance professionals to examine current industry issues under the common theme of "Technical, Financial & Human Factors – is there a new normal?"

Theft prevention, limitations for operation in ice under the Polar Code, oil price volatility, storage risk exposure, climate change affecting accumulation risks in the automotive industry, and cyber risk were amongst the spread of topical issues discussed.

This year, the association announced global premiums for 2014 of USD 32.6bn.

Although this was a 3.2% reduction on the 2013 figure, converting local currencies to a single US dollar figure was impacting on the true result.

Looking in more detail at the cargo sector, a number of local markets experienced positive growth but that growth was largely hidden by the strong US dollar. It was generally assumed that a loss ratio of 70% or less represented a "technical profit" for the sector and while the 2014 underwriting year seemed to have produced a technical profit (based on figures as of December 2014) it was likely that the Tianjin explosion – as potentially the largest single cargo loss ever recorded - would impact significantly on 2014 and 2015 results.

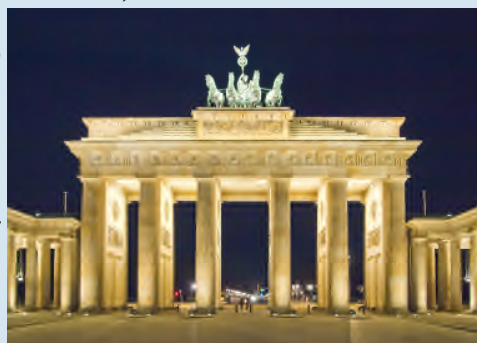
In the hull sector, premiums amounted to USD7.6bn which was a 5.8% reduction from 2013. The majority of hull business was written in US dollars and so the strong US dollar was not thought to be the sole reason for the reduction in premium income. Some markets (Lloyd's, IUA, Nordic) recorded an improvement over last year whilst others, notably Japan and Latin America, reported a reduction.

The extraordinary absence of major hull losses in 2014 resulted in the sector recording a technical profit for the underwriting year 2014, the first in 19 years. In addition, hull premiums were generally collected in US dollars whilst repair costs were often paid-out in local currencies, this might also have contributed to the stronger performance. But 2015 has already seen a number of total losses and this will have a negative impact on the 2014 underwriting year results.

Finally, focusing on the offshore energy sector premium income had reached USD 5.7bn, up 11.1% from 2013. Going forward, it was thought that the low oil price would have a significant effect on income in future years due to the postponement/cancellation of offshore projects and the subsequent reduction in contracted risk. A series of high profile losses already recorded in 2015 coupled with the low interest rate environment and general market instability was thought to have a detrimental effect on future income and results.

Overall, the conference agreed that the seeming improvement in the 2014 underwriting results was likely to be over-shadowed by events in 2015 – particularly in Tianjin. The trend towards large losses was continuing – *Costa Concordia* (2012), *Sandy* (2012) and *Tianjin* (2015) are recent examples; and the market environment continues to change.

The Berlin conference was a huge success with IUMI once again bringing together leading marine insurers to discuss the key issues of the business. Industry professionals found the event informative and topical, and a good time was had by all. Everyone is looking forward to next year's conference in Genoa, Italy (18-21 September 2016).



Ship masters warned of bauxite liquefaction dangers

By Nick Gooding FCII, IUMI Alternate Officer at IMO

The International Maritime Organization (IMO) has taken action to warn ship masters of the possible dangers of liquefaction associated with carriage of bauxite, following consideration of findings from the investigation into the loss of the 10-year-old Bahamas flag bulk carrier *Bulk Jupiter*, which was carrying 46,400 tonnes of bauxite when it sank rapidly, causing 18 fatalities in January 2015. A Circular approved at the September meeting of the IMO's Sub-Committee on Carriage of Containers and Cargoes (CCC), warned ship masters not to accept bauxite for carriage unless:

- the moisture limit for the specific cargo is certified as less than the indicative moisture limit of 10% and the particle size distribution as is detailed in the individual schedule for bauxite in the IMSBC Code; or
- the cargo is declared as Group A (cargoes that may liquefy), and the shipper declares the transportable moisture limit (TML) and moisture content; or
- the cargo has been assessed as not presenting Group A properties.

The Circular notes that while bauxite is currently classified as a Group C cargo (cargoes that do not liquefy or possess a chemical hazard) under the International Maritime Solid Bulk Cargoes (IMSBC) Code, there is a need to raise awareness of the possible dangers of liquefaction associated with bauxite. If a Group A cargo (cargo which may liquefy) is shipped with moisture content in excess of its Transportable Moisture Limit (TML), there is a risk of cargo shift, which may result in capsizing.

The mandatory IMSBC Code requires Group A cargoes to be tested, before loading, to determine their TML and their actual moisture content. The testing should confirm the cargo is below the maximum moisture content considered safe for carriage.

The Sub-Committee was informed of the marine safety investigation into the loss of the *Bulk Jupiter*, which has uncovered evidence to suggest liquefaction of cargo led to loss of stability. Ongoing research to evaluate the properties of bauxite is being carried out by Australia and Brazil, while an ongoing research project in China suggests that bauxite has various behaviours, based on the parent rock and how the materials weather.

IUMI has repeatedly stressed its concerns about the dangers of liquefaction following the loading of goods without proper testing and has taken an active position in the development of a more efficient regulation through the IMO. IUMI strongly supports the shipping industry's initiatives, especially shipowners efforts, to stop this.

Bulk Jupiter Investigation Report

The investigation report into the loss of the *Bulk Jupiter* can be downloaded from the Marine Casualties and Incidents module of IMO's Global Integrated Shipping Information System (GISIS) <https://gisis.imo.org/Public/Default.aspx> (registration required).

IUMI calls for records retention on change of ownership

By Mike Elsom, Navigate PR

IUMI has called for vessel owners and technical managers to make records available that provide important information on the condition of the ship and its machinery when a ship changes owner.

There is a current trend to remove these records and this has the potential to impact on the new owner's ability to operate the vessel effectively on takeover. IUMI believes that without continuity of information, it could be some months before the new crew and management are fully familiar with the vessel and machinery plant. During this time, there is an increased risk of machinery breakdown leading to inability or impairment to navigate, fire and explosion, or personal injury from component failure. This affects the risk profile of the vessel.

A position paper, released by IUMI in September, states that non-transfer and destruction of records is commonplace and the organisation questions why this practice is seemingly accepted by new owners. Failing to handover these important documents puts the incoming vessel managers, owners and underwriters at a serious disadvantage.

IUMI believes that insurers are being exposed to claims that could be avoided if adequate maintenance records had been provided. It says that a significant improvement to the vessel's risk profile would be achieved by requiring the maintenance records, operating reports, and spares inventory to be part of the permanent service history of the ship and covered by the regulatory regime, possibly through additional clauses in the sale and purchase agreement.

The full position paper is available from IUMI's website:

<http://www.iumi.com/committees/political-forum>

Marine Cargo in Reefer Containers

By Patrick Tillery, Battermann + Tillery Group (Germany), www.ba-ty.com, IUMI Professional Partner

As surveyors we frequently face temperature problems of cargo in reefer containers. Often, high value goods such as meat, fish or pharmaceuticals are involved.

In many cases, damage to goods in reefer containers is attributable to elevated temperatures of the goods resulting from insufficient cooling and/or icing in the area of the cold air supply. Furthermore, shipping lines usually do not disclose any temperature recordings after an incident involving damage to goods.

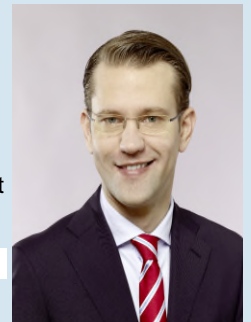
We consider the following points as key loss prevention measures:

- The set point for deep-frozen goods should not be -18.0°C (minimum for deep frozen status), but rather at least -25.0°C .
- Proper circulation of cold air inside the container must be ensured. Therefore, the cargo must not be stacked above the red line (maximum stacking height) and no free spaces must be left in the stowage pattern.
- Sufficient space is to be left in the door area for the circulation of cold air.
- Mobile temperature recorders (for example TempTale Mini or similar) are to be placed among the goods in order to document the temperatures within the container during transport. This data can subsequently be used in discussions about loss-minimising measures with the Veterinary Authorities, the shipping line and, of course, later on during recovery action. At least two data recorders should be placed among the goods, one on a pallet unit in the door area and one near the front wall.
- Finally, the goods should be sufficiently pre-cooled by the shipper, and the core temperature of the goods upon loading should be documented.

Further points, such as an assessment by the shipper prior to stuffing as to whether the reefer container provided by the shipping line is suitable for transport, the possibility of entering contractual agreements with the shipper and/or the shipping line concerning the quality and age of the provided reefer containers, the fact that ventilation openings in the container's front wall should be closed and the perusal of the pre-trip inspection (PTI) sticker should be taken into consideration as well.

BATTERMANN & TILLERY

For further information please do not hesitate to contact me Patrick Tillery - patrick.tillery@ba-ty.com



www.dpsurveys.com



Creating solutions through expertise

Battermann + Tillery Global Marine

Available at 572 locations all over the world

International Marine + Cargo Surveyors
www.globalmarine.expert



PROVIDING MARINE AND
ENGINEERING CONSULTANCY
ACROSS THE GLOBE

www.loc-group.com

Cyber Security Awareness

By Matthew Montgomery, Associate at Holman Fenwick Willan LLP, www.hfw.com, IUMI Professional Partner

Cyber security is not a new topic and yet it seems to have moved to the top of the agenda this year. It has been the subject of detailed analysis by IACS, the Joint Hull Committee, the IMO and was the topic of Dieter Berg's presidential workshop at IUMI's 2015 Conference, to name a few. And yet there is little or no anecdotal evidence of a cyber-attack on the marine community. Why then should shipowners be sitting up and taking notice?

To answer that question one need only look to the developments in shipping itself. The bridge and engine rooms are more reliant upon electronic communications than ever before and can be remotely monitored from ashore to the extent that automated ships are now a real possibility. As a result, the potential damage that could be caused by a cyber-attack has increased exponentially. That is one of the main reasons for the heightened focus.

The commentary has largely concentrated on the damage that an attack could do, including the manipulation of ECDIS charts or hacking into a vessel's AIS, GPS or DP systems. However the industry has been less clear on is what exactly shipowners should be doing to mitigate these risks. Although there are agreed international standards (see the ISO/IEC 27032), these are not specific to the maritime community. It seems, however, that change is afoot following the US Coastguard's 2015 publication on Cyber-Security and the imminent publication of BIMCO's Guidelines on Cyber Safety and Security Onboard Ships.

The general approach of the guidelines is to promote a culture of awareness by directing the spotlight on two particular areas. The first issue for owners to get to grips with is their own IT infrastructure and where there may be potential vulnerabilities. That may require assistance from an external consultancy and lawyers. The second issue for owners to address is their own internal culture and training to ensure that the importance of cyber security is understood and acted upon from the boardroom to the bosun.



Various shipping associations have invested significant time and resources to address the risks of a cyber-attack and make recommendations on how shipowners can mitigate this risk. There is no longer any excuse for the industry not to be prepared.

holman fenwick willan **hfw**

Remote Monitoring: A blessing and a curse?

By Barry Tarnef, Vice President and Senior Risk Specialist, Loss Control Services, Chubb Group of Insurance Companies, and member of the IUMI Loss Prevention Technical Committee

One of the world's largest shipbuilders recently announced it is collaborating with a global management consultancy to design what they call a "connected smart ship", enabling ocean carriers to manage their fleets and achieve operational and financial improvements through the application of digital technologies. Using a network of sensors that will be built into new vessels, owners will be able to capture a wide range of voyage details including location, direction and speed of the ship as well as weather, ocean currents and the status of on-board equipment and cargo. By applying real-time analytics, personnel will be able to make data-driven decisions on maintenance, scheduling and other functions that will support efficiency.

A few ocean carriers are also marrying technology with analytics and creating intelligent containers. These containers will allow them to track and collect real, or near real-time information, on cargo, specifically temperature-sensitive goods packed into refrigerated units, from origin through to destination on land or on sea.

The reefer containers are equipped with devices that can monitor temperature and humidity but can also detect elevated levels of carbon dioxide (CO₂) as well as shock, vibration, location and light/open door conditions. There is also the option to add probes that can be inserted inside packaging to provide pulp temperature of some commodities.

These data streams will be transmitted to centrally located command and control centers with carrier personnel able to intervene when the situation warrants such as temperature deviation beyond the set point caused by equipment malfunction, human error or simply failing to plug in the reefer ashore or onboard.

These devices afford unprecedented visibility into the condition of the increasing trade segment of perishable goods, including not only fruit, vegetables, dairy products, flowers, and fresh and frozen meat, but also high value cold chain pharmaceuticals and certain classes of chemicals that require a controlled transport environment, often with very little temperature tolerance.

Remote monitoring is a risk mitigating tool for both the shipper and the consignee, but it may pose greater liability to the ocean carrier for any cargo loss/damage due to their ascribed next level of care, custody and control. Since the shipment data may be made available to customers, they can pinpoint when, where and what events occurred, thus facilitating the claims process and ultimate recovery. Moreover, the ability to unilaterally adjust conditions remotely, for example the temperature settings, either by the ocean carrier or the shipper could potentially pose a threat to the well-being of the shipment.

As vessels and containers become increasingly "smarter" the risk of a data breach may also increase. Connectivity may make vessel operating systems more vulnerable to cyber-attacks.

It seems as if these advances involving technology pose a risk-reward dichotomy. While the devices offer tangible benefits, their inherent connectivity makes them and the vessel operating systems they monitor or support, more vulnerable to attacks so cyber insurance should be a consideration and factored into their design and use.

Mutual Recognition – no need to enhance the programme to so-called “Level 4 products”

By Lars Lange, IUMI Secretary General

On 25 September 2015, a workshop with industry stakeholders on the regulation of the so called “Mutual Recognition” (MR) took place at Strathclyde University Glasgow. The EU Commission has to implement Art. 10.1 of the 2009 directive (EC) 391/2009 which sets out the rules for the intended MR. Mutual Recognition means that one classification society/recognised organisation “RO” is obliged to recognise a certificate for a certain vessel part that has already issued by another RO without undertaking its own testing. According to the directive, the EU commission had to report to the EU parliament in November 2015 about the status of the implementation “based on an independent study”. This study has been carried out by Strathclyde University Glasgow. The workshop in Glasgow was intended to introduce the results of the study to the stakeholders involved, such as ICS, IUMI, class and manufacturers; and to discuss content, conclusions and further steps to be taken.

For the implementation, the relevant products are organised into six levels, starting from Level 1 – no safety relevance – to Level 6 – high safety relevance. The involved ROs are still working on the development of MR procedures for Level 3 products. IUMI assumes that safety relevance with regard to marine insurance starts generally at Level 4. Up to autumn 2015, 5 tiers of Level 3 products for MR had been released; this is 55 products in total. Tier 5 was published in July 2015. It is remarkable that only 38 certificates for producers for Mutual Recognition have been issued so far. The complete report can be found here: <http://ec.europa.eu/transport/modes/maritime/studies/doc/2015-05-29-report-mutual-recognition.pdf>.

IUMI pointed out during the workshop that it sees no need to enhance the implementation to products belonging to safety Level 4. Especially when taking into account that Level 4 products are not classified by “simple” type approval like Level 3 products, but have to be classified individually by the respective class society. Safety is the first priority and for insurers it is of the utmost importance that they can rely on the RO’s judgement on the safety of the vessel. Therefore a class society should not be forced to recognize the certificate on safety relevant parts issued by any other RO. This view was seconded by several other industry stakeholders.

Address by the Secretary General

By Lars Lange, IUMI Secretary General

IUMI is happy to announce that international law firm Clyde & Co, with 45 offices worldwide, has joined IUMI as a Professional Partner, as of the 1 December 2015. Clyde & Co. represent clients on both wet and dry issues throughout the marine industry, with 150 marine lawyers based in key trading hubs around the globe. With 80 years' experience in maritime law, Clyde & Co advises clients on all current challenges in the maritime business such as piracy and sanctions, challenges presented by ultra large containerships and the opening of Arctic shipping lanes, to name a few. Clyde & Co. works with clients from all areas of the maritime sector, including shipbuilders, owners, charterers, salvors, and P&I clubs and insurers, with a special focus on marine insurance. Clyde & Co. works with all parties within the marine insurance industry such as insurers, syndicates, companies, captives, brokers, P&I clubs and loss adjusters, providing a comprehensive range of legal services, advising on hull, energy, cargo, liability, business interruption and reinsurance matters, and has developed a proven track record in advising on marine and energy claims issues. IUMI is looking forward to collaborating with the Clyde & Co. experts in the future, working on the current marine insurance market issues.

IUMI is working hard on advancing its presence in the Asian marine insurance markets. Recent visits from the IUMI President, Executive Committee members and the Secretary General to Thailand and Singapore served for a better understanding of the local markets and challenges; and also presented the opportunity to report on IUMI's current activities and projects. A successful conference in Malaysia in early November 2015, organized by the Malaysian insurance association PIAM and IUMI, led to a much better understanding of each other and improved relationships. A visit to the new Chinese IUMI member SIMI in Shanghai will follow, as well as visits to potential new IUMI member associations in the South-East Asian region.

On the European side, the increased focus on EU activities has led to a much deeper involvement and positive results. IUMI has been participating recently in a number of workshops, meetings and exercises on an EU level, for example with regard to the financing of the new ship recycling regulation, to the new operational guideline on places of refuge and to the implementation of the Mutual Recognition provisions. IUMI was given the opportunity to explain insurer's positions and ensure the EU authorities are aware of these and taken into account when taking measures. A fruitful cooperation for both regulators and insurers has been established.

The Commission reported to the Parliament on 10 November 2015, and this report was based on the Strathclyde University Glasgow study. All further steps are currently dependent on the feedback and conclusions from the parliament. DGMove is considering holding another workshop during the EU Maritime Day in early 2016.

IUMI Contacts

Lars Lange - Secretary General
Email lars.lange@iumi.com
Phone 0049 (0) 40 2000 747-0
Mobile 0049 (0) 160 700 55 99



Gillian Erschfeld (Assistant)
gillian.erschfeld@iumi.com

IUMI
Grosse Elbstrasse 36
D-22767 Hamburg
Germany