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IUMI Policy Agenda

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Contents[1]

IUMI's Policy Agenda includes topics and issues which require advocacy efforts by relevant IUMI Technical Committees and/or the Policy Forum. ESG matters which do not require specific advocacy but are important to raise awareness about are under the remit of IUMI's ESG Working Group and can be found in the ESG Watch List on the IUMI website.

[1] Items are listed in alphabetical order.
Recommended core documents are highlighted in red

UNDER REVIEW

1. Autonomous / unmanned transport

Unmanned transports are gaining acceptance from industry and public entities as research and innovation bring the possibility of driverless trucks and vessels closer to realization. This raises some legal and liability issues that need to be resolved.

Insurers also need to address the risks related to innovative technologies and the internet of things. New types of failure modes may be introduced due to the lack of knowledge and unforeseen interdependencies in the system design, operation complexity, and environmental challenges. Cyber-attacks, connectivity, interactions between components and between technical systems and humans, and autonomy assisted accidents are among the challenges.

To become insurable, the use of autonomous systems must rely on proper industry standards, certification and classification regimes. Verification of safe performance is crucial.

Vessels

An unmanned vessel can be both remote controlled or fully automated, and it has been suggested that the first crewless vessel will be in service by the end of the decade. Most likely, there will be a number of variations and a stepwise progress, including the use of automated technologies with a reduced number of crew on board and for certain manoeuvres.

The IMO Maritime Safety Committee (MSC) has thus far agreed to focus on the following two levels of autonomy: (1) Remotely controlled ship with seafarers on board and (2) Remotely controlled ship without seafarers on board.

Interim guidelines for trials of Maritime Autonomous Surface Ships (MASS) were finalized by MSC in June 2019. As a basic principle, these trials shall meet at least the same level of safety, security and environmental protection as required for conventional vessels.

In April 2022, MSC 105 agreed to develop a goal-based Code for MASS. Work has since progressed, and MSC has agreed that the Code will apply to SOLAS cargo vessels only. It is further agreed in principle that the Code should contain a risk-analysis based approach, that a human master shall be responsible regardless of the vessel's mode of operation and that there is no need to amend COLREGS to accommodate MASS at this stage. A non-mandatory MASS Code is planned for adoption by MSC 111 in May 2026. This will be followed by an experience-building phase. The earliest possible entry into force of a mandatory MASS Code through amendments of SOLAS and other IMO instruments will be 1 January 2032.

There are also several other initiatives relating to legislation and insurance of autonomous vessels. These include; Comité Maritime International (CMI) has formed an International Working Group on

Unmanned Vessels which presented results from its research on liability issues to the IMO (LEG) in January 2024, Association Mondiale de Dispacheurs (AMD) are considering how the adoption of unmanned vessels may impact marine insurance claims and the application of general average, and the International Group of P&I Clubs (IG) has formed a working group to consider liability matters. BIMCO has adopted a standard contract for autonomous vessels, AUTOSHIPMAN, which is adapted from the SHIPMAN 2009 form to govern ship management services and provide a framework for the obligations, responsibilities, and liabilities.

Trucks

Autonomous trucks have the potential to make freight transport more efficient, cost-effective, reliable, sustainable, and, above all, safer. They also offer a promising solution to one of the trucking industry's most pressing challenges: a significant and growing labour shortage. These benefits are driving the demand for self-driving trucks globally.

In 2019, the World Forum for Harmonization of Vehicle Regulations (WP.29), a subsidiary body of the Inland Transport Committee (ITC) under the United Nations Economic Commission for Europe (UNECE), introduced a Framework Document to guide future normative work on autonomous driving. By 2021, WP.29 adopted an amendment to the United Nations Regulation on Automated Lane Keeping Systems (ALKS). This amendment established technical requirements for the deployment of ALKS in heavy vehicles, such as trucks, making it the first binding international regulation for SAE Level 3 vehicle automation in heavy vehicles. However, a globally harmonized legal framework for autonomous driving remains absent, creating a patchwork of regulations across different countries.

Comprehensive overviews of national and international regulations, as well as strategies for connected and automated driving, can be found through initiatives like Connected and Automated Driving (CAD).

The EU is at the forefront of automated driving innovations, supported by a robust regulatory environment and collaborative projects. In Germany, for instance, a pilot program initiated in mid-2024 involves IVECO S-Way trucks equipped with Plus's automated driving system transporting freight between distribution centres. Efforts to harmonize the legal landscape also continue. In 2022, the European Commission proposed a revision to the Product Liability Directive (PLD), introducing strict liability for producers of defective products, including autonomous vehicle technologies. This proposal aims to ensure consistent consumer protection across the EU while raising questions about insurance coverage, particularly for cybersecurity risks and shifting liability from drivers to manufacturers.

In Asia, countries like Japan and China are advancing rapidly in automated freight technologies. Japan announced plans in late 2024 to develop an "automated conveyor belt road" between Tokyo and Osaka. This system will feature dedicated corridors for unmanned truck transportation,

addressing driver shortages and reducing carbon emissions. Trial runs are scheduled for 2027, with full operations expected by the mid-2030s[2].

In China, major manufacturers such as BYD and NIO received approval to test Level 3 and Level 4 autonomous driving technologies on public roads, marking significant progress toward deployment[3].

While autonomous trucks promise enhanced safety, the complexities of liability and insurance cannot be ignored. Responsibility for accidents may shift from drivers to technology providers or other parties involved in the design, production, or maintenance of autonomous systems. European countries typically mandate compulsory motor vehicle insurance to cover truck-related accidents. However, these policies will need to adapt to address risks specific to autonomous vehicles, such as cybersecurity incidents and liability shifts.

Globally, the autonomous truck market is on a rapid growth trajectory, projected to increase from USD 35.51 billion in 2024 to USD 76.01 billion by 2032. This reflects a compound annual growth rate (CAGR) of 10.0%, underscoring the significant economic potential of self-driving trucks[4] .

Timeline / important dates

- MSC scoping exercise June 2017 - June 2020.
- LEG scoping exercise April 2018 – July 2021.
- Target completion year within MSC for a non-mandatory code: 2026.
- MSC 111: May 2026.

IUMI will:

- Monitor ongoing industry and government-run projects and provide input as appropriate.
- Monitor development of a MASS Code by the IMO and take part in discussions on regulatory amendments.
- Encourage classification societies to take an active role in both technical and operational risk aspects of increasingly autonomous vessels.
- Encourage the development of industry standards, certification schemes and class requirements for autonomous systems and remote control centres.

2. Casualty Investigations

If very serious marine casualties occur, SOLAS requires the flag administrations involved to conduct a safety investigation. Relevant information arising from the investigations should be made available to the IMO in a timely manner so that lessons can be learnt. The “Code of the international standards and recommended practices for a safety investigation into a marine casualty or marine

[2] Japan plans automated cargo transport system to relieve shortage of drivers and cut emissions, AP News
[3] BYD, NIO Get Approval to Test Automated Driving Technology on China Roads, Wall Street Journal
[4] Autonomous Truck Market Size, Share & Industry Analysis, Fortune Business Insights

incident" (Casualty Investigation Code) provides assistance and defines a very serious marine casualty as "a marine casualty involving the total loss of the ship or a death or a severe damage to the environment." There is no mandatory defined time frame for the investigation to be carried out and the findings made available. It is merely stated that the reports should be "completed as quickly as practicable".

INTERCARGO, the International Association of Dry Cargo Shipowners, published the "Bulk Carrier Casualty Report", providing information on bulk carrier losses over a rolling 10-year period, every year. The association has found that from January 2013 to December 2022, only 19 investigation reports are available, which equates to a reporting rate of 73%. The average reporting time for 2013 to 2022 is approximately 28 months.

In comparison to previous 10-year spans, the reporting times and reporting rates have actually improved. However, accident reports are still missing from as far back as 2014 and 2015.

Due to the critical nature of improving the safety and of protecting the environment, the importance of lessons learned cannot be overstated. Without accurate investigation reports being made available in a timely manner, key improvements to safety-related requirements may come too late or not at all. For this reason IUMI supports work in the IMO's Sub-Committee on the Implementation of IMO Instruments (III) which aims to establish a new investigation status facility in the IMO's virtual platform. This will provide clarity for interested stakeholders on the progress of marine investigations. In addition, the work aims to facilitate timely completion of casualty investigations. This includes a requirement to provide an investigation status and defined time periods for updates on the investigations.

Timeline:

- IUMI co-sponsored document III 9/4/5 which suggests amending the Casualty Investigation Code. The paper was discussed at III 9 in August 2023.
- A new agenda item has been proposed to the Maritime Safety Committee for a new output on a comprehensive and holistic review of the Casualty Investigation Code which will be revisited by MSC in 2025.
- IUMI supports the new output and co-sponsored a joint document to this effect.

IUMI will:

- IUMI advocates for the timely publication of casualty investigation reports.
- IUMI further urges that such reports are made available for all very serious marine casualties to ensure lessons can be learned and safety improved.

3. Containers lost at sea

According to the World Shipping Council a number of containers are lost at sea each year. High profile accidents include the One Apus which lost a total of 1,816 containers (November 2020) and

the Maersk Essen which lost 750 containers (January 2021) during their respective voyages. These events show the necessity to review the root causes of the incidents. A complex set of technical and operational aspects play a role requiring a careful assessment.

Container ships have grown at an incredible pace over the past 40 years. While the maximization of economies of scale and the overall impact of transportation costs is impressive, this does come with increased risk.

The growing size of container vessels has led to large beams and container stack heights which result in relatively large metacentric heights (GM). This makes the vessels very stable/stiff which in rough weather conditions can cause high rolling accelerations. The effect of strong winds on the on-deck container stacks, also known as ‘sail area’ or ‘air draft’, further increases the windage area causing extreme momentum. Specific wave patterns may also lead to violent movements such as parametric or synchronous rolling, exerting severe loads on the container lashing and securing gear.

The stowing, lashing and securing of containers is another factor potentially contributing to the loss of containers at sea. The distribution of weight within a container stack has an impact on the stability of a vessel. If the weight of a container is not properly declared it may be stowed in an unsuitable location within the stack, causing its collapse. When considering the impact of improper container weight and number of containers transported by these ships, the multiplied effect is an important consideration. Enforcement of the IMO’s verified gross mass (VGM) regulation is therefore critical to the safe operation of containerships.

Improper or damaged lashing and securing equipment, twist locks and containers can also cause the collapse of a container stack. A chain is only as strong as its weakest link, hence one element in the container stowage and securing process may lead to the collapse of a container stack which in turn may clash with its neighbouring container stack causing the breakdown of several stacks.

On the operational side, calculation methods are used to determine the maximum capacity of containers to be loaded for a vessel. These models are based on “in-design conditions” which preclude, for instance, unfavourable sea conditions. “Off-design” conditions must be averted by the crew at an operational level, e.g. through weather routing and passage planning. The accuracy of these calculation models is an essential safety component. The models also underlie economic considerations to maximize a vessel’s capacity. The rules for the calculations must therefore be based on a level playing field which ensures that they keep within safe boundaries.

Other contributing factors may involve human error, including, but not limited to, errors in cargo stowage plans, improper adherence to container stack plans, correctly following lashing plans, re-securing of lashings during voyages, poor cargo stowage within containers, adherence to weather routing, and prudent vessel navigation while in heavy weather.

Climate change and the increasing frequency of severe weather both at sea and ashore is a contributory factor. Improvements in marine weather forecasting and weather routing services are beneficial in planning for severe weather.

Cargo underwriters have been and will continue to be impacted by the loss of containers overboard. The high number of casualties within a short period of time is unprecedented. IUMI takes the view that although it is premature to define this as a systemic threat, every container lost is one container too many. Losses are not just limited to the containers lost overboard. There is also cargo damaged as a result of container stack collapses, damages to the vessels, and environmental impact. Resulting Cargo, Hull & Machinery, Protection & Indemnity and Marine Liability losses as well as uninsured losses have a significant economic impact. There is also concern that salvage capabilities have not kept pace with the increase in vessel size. Therefore, the various aspects relevant to the safe carriage of containers must be reviewed and action taken to correct the shortcomings.

Work to this effect has been ongoing in the TopTier Project hosted by the Dutch MARIN Institute. IUMI has been involved in several of the work streams which aim to address the problems in its full complexity. An outcome of the project is a Notice to Mariners which provides guidance to crew and operational staff of container vessels on how to plan, recognize and act to prevent parametric rolling in following seas. Several education videos have also been published. IUMI further co-sponsored updates to the IMO on the progress of the MARIN Top Tier Joint Industry Project (JIP) on securing container safety which include detailed information about the work streams.

In May 2021, the IMO Maritime Safety Committee (MSC) agreed to develop measures to facilitate detection, reporting, positioning, tracking and recovery of containers lost at sea as a new work item. In June 2023, MSC 107 approved draft amendments to SOLAS which will require the Master to report without delay any lost containers to the nearest coastal State and the flag State. The amendments are expected to enter into force on 1 January 2026.

In February 2023, IUMI co-sponsored a paper to the Maritime Safety Committee, proposing a new output on prevention of loss of containers at sea. The proposal was agreed by MSC 107 in June 2023, and subsequently allocated to the Sub-Committee on Carriage of Cargoes & Containers (CCC)Further, MSC 107 also agreed to include an output on 'Revision of the Revised guidelines for the preparation of the Cargo Securing Manual (MSC.1/Circ.1353/Rev.2) to include a harmonized performance standard for lashing software to permit lashing software as a supplement to the Cargo Securing Manual'. This new output originated from the regular exchanges between IACS and IUMI. The CCC Sub-Committee discussed the issue at its 10th session in September 2024 and established a Correspondence Group on containers lost at sea. The CG is tasked to identify potential amendments to relevant IMO instruments and to undertake a revision of the revised guidelines for the preparation of the cargo securing manual (MSC.1/circ.1353/rev.2) to include a harmonized performance standard for lashing software in order to permit lashing software as a supplement to the cargo securing manual. IUMI participates in the Correspondence Group.

IUMI will:

- Support the implementation of the findings of the TopTier JIP into the IMO to effect regulatory improvements with regard to containers lost at sea.
- Raise awareness for the complexity of the root causes of containers lost at sea and means to address them.

- Support lashing software being allowed as supplement to the Cargo Securing Manual for all operating container vessels irrespective of the year of built. The lashing software has to comply at least with minimum and harmonized standards which are to be discussed in the CCC Sub-Committee.

4. Containership fire safety

The increasing size of container vessels and recent incidents contribute to the high awareness and importance placed by insurers on several issues related to the safety of these vessels. Fires count among the worst hazards of the global shipping industry, and every ineffective attempt to extinguish a fire puts the crew at risk. Damage to the environment, cargo and the vessel also increases. Misdeclaration of cargo and insufficient fire detection and firefighting capabilities are the main challenges related to this peril.

Container contents

The contents of a container must be known if it is to be transported safely, but misdeclaration is a recurring safety problem. This applies equally to road, rail, brown and blue water transport.

Containers often contain a wide range of hazardous and toxic substances. It is reported that approximately 20% of containers in transportation are misdeclared. An analysis from the Cargo Incident Notification System (CINS) shows that in just over a quarter of the incidents where causation was detected were attributable to cargo being misdeclared. This may lead to insufficient handling of the container, and worst case an incorrect firefighting strategy that may increase the danger of combustion of the goods in the container.

Firefighting systems on container vessels

Insufficient firefighting capacity on board large container vessels poses a challenge that is only increasing with the size of these vessels.

Based on a 2008 impact assessment, the IMO's Maritime Safety Committee (MSC) approved in June 2013 new requirements for fire protection of on-deck cargo areas. The amended SOLAS regulation II-2/10 requirements only apply to new vessels constructed on or after 1 January 2016. In addition to all other fire protection arrangements as per existing regulations, vessels designed to carry five or more tiers of containers on or above the weather deck shall from then on also be provided with mobile water monitors and at least one water mist lance.

Although these changes were a step in the right direction, concerns remain with the firefighting equipment on existing vessels. With the growing size of container ships, the challenge of insufficient firefighting arrangements is becoming even greater.

Consequently, IUMI recommended in a position paper from September 2017 that responsible authorities, class and relevant industry stakeholders engage in discussions on how to further improve the fire detection, protection and firefighting capabilities on board container vessels.

Together with Germany, Bahamas, BIMCO and CESA, IUMI drafted a submission to the IMO Maritime Safety Committee's 102nd session with a view to amending SOLAS.

MSC 103 agreed to include in the agenda of the Sub-Committee on Ship Systems and Equipment (SSE) for 2022-2023 an output on "Development of amendments to SOLAS chapter II-2 and the FSS Code concerning detection and control of fires in cargo holds and on the cargo deck of containerships", with a target completion year of 2025, in association with the Sub-Committee on the Carriage of Cargoes and Containers (CCC). The amendments shall apply to new ships and they shall enhance provisions for early fire detection and effective control of fires in containerized cargoes stowed on and under deck of containerships. The amendments shall enter into force on 1 January 2028, provided they are adopted before 1 July 2026.

A group of experts had been formed by IUMI to outline a road map for amending SOLAS. Based on input from this group, six flag states, IUMI, BIMCO and IACS submitted in November 2021 a paper with a proposed outline and initial assessment of gaps and regulations to SSE.

In December 2021, EMSA launched a 'Study Investigating Cost Efficient Measures for Reducing the Risk from Cargo Fires on Container Vessels (CARGOSAFE), which follows the structure of a Formal Safety Assessment (FSA) and includes the tasks of hazard identification, risk analysis, risk control options, cost effectiveness assessment, and making recommendations for decision making. In November 2022, MSC 106 agreed to establish an FSA expert group to review the outcome of any relevant studies (including CARGOSAFE) relating to detection and control of fires on container vessels. The CARGOSAFE report was finalized in March 2023 and subsequently submitted to MSC 107 for consideration by the FSA expert group which met in October 2023. The FSA EG confirmed that the CARGOSAFE study was conducted in line with the IMO's FSA guidelines.

Possible risk control options and regulatory amendments were on the agenda of the IMO Sub-Committee of Ship System and Equipment (SSE) in March 2024. IUMI had submitted document SSE 10/10/2 together with France and BIMCO in which the co-sponsors advocated for certain risk control options of the Cargosafe study which will have the most significant impact for improvements in fire detection and firefighting onboard containerships. Particularly important in this regard are the implementation of linear heat detection systems which detect temperature rises in individual containers as well as fixed water monitors to be installed on the superstructure of the vessels.

The IMO Fire Protection Correspondence Group has continued its work to amend SOLAS regulations. A crucial improvement which was supported and advanced by IUMI is the requirement for newbuilds to include not only mobile water monitors, but fixed water monitors as well. A number of detailed SOLAS amendments have been discussed during four rounds of correspondence. The considerations will be continued at SSE 11 in February 2025. IUMI will advocate for mandatory requirements for fixed water monitors as well as improved detection methods such as video fire detection (on deck) and linear heat detection (under deck).

IUMI will:

- Support a holistic approach to preventing and mitigating fires starting in the cargo on board container vessels.
- Support measures that improve the monitoring of containers and their contents.
- Support internationally harmonized legislation and national regulations based on the CTU Code.
- Monitor and support measures to ensure the structural safety of large container vessels.
- Support an amendment of SOLAS to improve fire safety.
- Support the NCB recommendations and the World Shipping Council's Cargo Safety Program to address the carriage of undeclared, mis-declared and other non-compliant dangerous goods.

5. EU Recognised Organisations and Mutual Recognition

Article 10 of EU Regulation No. 391/2009 on common rules and standards for ship inspection and survey organizations states that "Recognised organisations shall, in appropriate cases, agree on the technical and procedural conditions under which they will mutually recognize the class certificates for materials, equipment and components based on equivalent standards, taking the most demanding and rigorous standards as the reference."

The EU Recognised Organisations (ROs) have established procedures and technical requirements for Mutual Recognition (MR) and coordinate their work through an Advisory Board supported by a Technical Committee. A hierarchy of six safety levels has been agreed between the ROs. Levels I and II include products with no/very low impact on safety and are uncontroversial. Level III products are currently under consideration, and the most recent MR Technical Requirements were published on 1 January 2019 (Tier 7). In May 2020, the EU RO MR Group published a summary report of their activities from 2015-2019 to furthering the implementation of the MR scheme.

Insurers expect the surveys of safety critical materials, equipment and components to be carried out by the RO classing the vessel. Classification has an important role in ensuring a certain level of safety to the vessel and its equipment, and there is usually a requirement under most individual insurance conditions that the vessel shall be classed with a classification society approved by the insurer before cover commences. Should any RO be allowed to certify and approve components and equipment for a vessel at all safety levels and regardless of which society will be responsible for classing the vessels, neither the classification society nor owners or underwriters will be able to assess a vessel's quality, or the quality of components that have gone into them. To allow MR on safety critical materials, equipment and components would undermine the significance of ship classification as a key component of today's safety regime at sea and is a major cause of concern among underwriters.

There is also a question related to the acceptance of the EU RO regime by third party flag states. The sovereignty of the flag state under which a vessel operates is at the core of international maritime regulations and widely supported by the global marine insurance industry.

Based on a study from the University of Strathclyde, the European Commission (EC) reported on the status of the implementation to the European Parliament and the Council at the end of July 2015.

The EU RO MR Group released an alternative Product Evaluation Process (PEP) model as well as a PEP Instruction Manual and PEP Guiding Questions in June 2020.

In September 2024, the EU RO MR Group organized a workshop for all stakeholders involved in Hamburg. During the workshop, IUMI emphasized the historically grown effective and trusted cooperation between insurers and classification societies, the importance of safety from an insurer's perspective, and IUMI's preference for the MR scheme to cover only non-safety critical parts. For safety-critical parts, IUMI suggested that the classification should be conducted by the Recognized Organization (RO) that is classifying the vessel. IUMI confirmed their position recommending that mutual recognition be clearly limited to materials, equipment and components of proven low safety criticality. The scope of the MR should not go beyond further analysis and consideration of Level III products. IUMI emphasized the importance of a reliable system and warned that any dilution will conflict with insurance matters.

Relevant authority / organisations and documents

- European Union – Article 10.1 of EU Regulation (EC) No 391/2009 of 23 April 2009 on common rules and standards for ship inspection and survey organisations.
- EU RO Mutual Recognition Group
    - EU RO Mutual recognition group report 2015-2019, May 2014.
- IMO – Proposed Code for Recognized Organisations (RO Code) and related amendments to SOLAS chapter XI-1 and the 1988 Load Lines Protocol, and resolution MEPC.237(65).
- IUMI
    - Letter to Commission 30 October 2013 & reply letter 6 December 2013.
    - Response to questionnaire from Strathclyde University 8 December 2014.
- University of Strathclyde
    - Study report to the EC 29 May 2015.
    - Workshop report October 2015.

Timeline / important dates

- RO Code in force from 1 January 2015.
- EC report to Parliament (EP TRAN) on 21 December 2015.
- EU RO MR workshop, Hamburg, 5 September 2018.
- Meeting with EC DG MOVE, Brussels, 8 March 2019

- EU RO MR workshop, Hamburg, 4 September 2024.

IUMI will:

- Recommend that mutual recognition is clearly limited to materials, equipment and components of proven low safety criticality. Scope of the MR should not go beyond further analysis and consideration of Level III products.
- Participate in workshops and consultations as appropriate.

6. Liability

The insurance of marine liabilities helps to protect third party rights. Since the liability (e.g. for environmental damages caused by an oil-spill) can be extraordinarily high, sufficient insurance coverage for these liabilities is crucial. Many international liability conventions rule compulsory insurance requirements, and direct action against insurers is partly ruled as well.

Marine liability insurance is mainly provided by Protection and Indemnity Clubs (P&I Clubs) organized as mutual insurers with shipowners as members. The 12 largest P&I Clubs are organized under the umbrella of the International Group of P&I Clubs (IG).

While the member companies of IUMI's member associations predominantly provide insurance coverage for property damages to the hull and machinery of vessels or offshore energy units, and cargoes in transit, some of the companies also offer marine liability insurance through reinsurance arrangements or directly through covers such as 'fixed premium P&I' or 'war P&I'.

Potential gaps in liability insurance for 'non-IG insurers'
In April/May 2014, the IMO Legal Committee (LEG 101) adopted Guidelines for accepting insurance companies, financial security providers and IG P & I Clubs to verify the compulsory insurance requirements. With a reference to these guidelines, six Member States suggested in a submission to LEG 107 in March 2020 that further consideration may be desired of problems encountered in some oil pollution incidents involving insurers that are not members of the IG. The belief is that this is an issue that affects not only the 1992 CLC, but also other IMO liability conventions.

The issue is also being examined by the governing bodies of the IOPC Funds, and during the 108th session of the IMO Legal Committee in July 2021, the IOPC Funds provided an update on the problems encountered in some oil pollution incidents involving 'non-IG insurers'. 147 incidents were identified of which 44 incidents either had no insurer or the insurer was unidentified.

A proposal for a new output was submitted by five Member States in December 2021, and LEG 109 subsequently established a Correspondence Group, which included IUMI, with the following key workstreams:

- development of informational pamphlets for the Bunkers Convention, Civil Liability Convention, Athens Convention and the Wreck Removal Convention to assist Flag States, Port State control officers, shipowners, and insurers in their interpretation and application of the liability and compensation requirements of the Conventions
- review of existing IMO guidelines; primarily IMO Circ. No. 3464 for accepting insurance certificates,
- development of a new GISIS module for those involved in issuing convention certificates.

In March 2023, LEG 110 approved the text of three pamphlets (Bunkers Convention, Civil Liability Convention and Wreck Removal Convention). Further, an intersessional Correspondence Group was established to review the IMO guidelines and create a new GISIS module.

Between LEG 110 (2023) and LEG 111 (2024), IUMI was involved in a further Correspondence Group on the revision of the Guidelines for accepting Insurance Companies and Certificates and the discussion on measures to assess the need to amend liability limits approved led by Canada.

At LEG 111 (2024), the Committee approved the revision of the Guidelines for accepting insurance companies, financial security providers and the International Group of Protection and Indemnity Associations (CL No.3464). The updated Guidelines will be issued via a LEG circular. The purpose of these guidelines is to provide State Parties to conventions covering liability issues with guidance for accepting insurance companies and certificates or similar documentation from insurance companies, financial security providers, IG members and P&I Clubs outside the IG. Relevant conventions include:

- the International Convention on Civil Liability for Oil Pollution Damage, 1992, as amended (1992 Civil Liability Convention).
- the International Convention on Civil Liability for Bunker Oil Pollution Damage, 2001 (2001 Bunkers Convention).
- the Nairobi International Convention on the Removal of Wrecks, 2007 (2007 Nairobi WRC); and
- the International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, 1996, as amended by the Protocol of 2010 to the Convention (the 2010 HNS Convention).

The revised Guidelines include a list of definitions and a new section on ‘Criteria for accepting Insurance Certificates’. The criteria and documentation for accepting insurers and insurance certificates have also been modified and expanded.

LEG 111 established a further Correspondence Group towards LEG 112 (2025) to look into the necessity to preparing a further Guideline with regard to liabilities under the “Athens Convention” 2002 / 2006. IUMI participated in this Correspondence Group.

The group did not agree on a proposed course of action, but two options were proposed to LEG 112 (scheduled for March 2025): **Option 1:** A reference to the Athens Convention 2002 could be

included in the guidelines contained in LEG.1-Circ.16 for accepting insurance certificates and insurance companies, financial security providers, and protection and indemnity clubs (P & I Clubs) or the application "*mutatis mutandis*" of such guidelines for non-war risks. **Option 2:** A State Party to the Athens Convention 2002 could make use of the guidelines contained in LEG.1-Circ.16 for accepting insurance certificates and insurance companies, financial security providers, and protection and indemnity clubs (P & I Clubs) or the application "mutatis mutandis" of such guidelines for non-war risks.

1910 Collision Convention

The Comité Maritime International (CMI), at the recent Executive Council meeting, established an international working group to consider the review of one of CMI's most successful conventions, the Collision Convention 1910. The Legal Committee of the IMO has shown interest in assisting the CMI in piloting this project. The CMI Intersessional Working Group aims to provide input of what the new convention should include prior to LEG 110.

The initiative for a new IWG flows from two sources. First, the IMO is reviewing a series of instruments, including the Collision Convention 1910, as may be required to accommodate the concept of autonomous ships. Secondly, the Italian Maritime Law Association set up its own working group in 2019 to canvass its membership on the expediency of reviewing the Collison Convention 1910 along with the 1952 conventions concerning civil and penal jurisdiction where a collision occurs.

The 1910 convention covers very important aspects of collision liability. It has been adopted by numerous countries. The review could include the scope of application of a revised convention, court jurisdiction over collisions and compulsory insurance for collision liability. All aspects of the 1910 convention could be considered, and the CMI prepared a questionnaire to maritime law associations in February 2023 to get some further guidance. IUMI is represented in the CMI WG by the Legal & Liability Committee Chair Charles Fernandez.

Relevant authority / organisations and documents

Non-IG insurers

- **IMO – Legal Committee**
  - ***Circular Letter 3464:*** Guidelines for accepting insurance companies, financial security providers and the IG P & I Clubs, July 2014.
  - ***LEG 107/6:*** Compulsory insurance requirements under IMO conventions and insurance problems, submitted by Canada, Denmark, Italy, Japan, Norway and Republic of Korea, 9 January 2021.
  - ***LEG 108/5****:* Review of insurance problems with non-IG insurers, submitted by IOPC Funds, 20 April 2021.
  - ***LEG109/13:*** Proposal to add a new output under the work programme on the Development of guidance for the proper implementation and application of IMO

liability and compensation conventions, submitted by Canada, Denmark, Italy, Japan and United Arab Emirates, 24 December 2021.
    - ***LEG110/7:*** Report of the Correspondence Group on measures to transparently assess the need to amend liability limits, submitted by Australia, 20 December 2022.
    - ***LEG110/10:*** Proposed measures related to Guidance for the proper implementation and application of IMO liability and compensation conventions, submitted by Canada, Greece, Italy, Malaysia, Republic of Korea, United Arab Emirates, ICS, IG and IUMI, 22 December 2022.
    - ***LEG110/WP.6:*** Measures to assess the need to amend liability limits, report of the Working Group, 20 March 2023.
- **IOPC Funds**
    - ***IOPC/OCT18/5/5/1****:* The 20 incidents involving the IOPC Funds and non-IG insurers are available in this document.
    - ***IOPC/NOV20/5/5/1****:* Conclusions of the sixth joint Audit Body and the recommended measures and future tasks to be undertaken in respect of the risk relating to 'non-IG insurers'.
- **CMI:** Questionnaire to maritime law associations on the collision conventions, 20 February 2023.

Timeline / important dates

- LEG 107: 27-30 November, 1 December 2020.
- LEG 108: 26-30 July 2021.
- IMO Council, 34th extraordinary session, 8-12 November 2021.
- IMO Assembly, 6-15 December 2021.
- LEG 109: 21-25 March 2022.
- LEG 110: 20-24 March 2023.
- CMI questionnaire: deadline 31 May 2023.
- CMI colloquium: 14-16 June 2023, Montreal.

IUMI will:

- Monitor developments via the IUMI Legal & Liability Committee and Policy Forum.
- Liaise directly with the IMO LEG as required to represent members' interests.
- Support a new output on addressing problems with so called 'non-IG insurers'.
- If agreed, support the work of the IMO Legal Committee in developing further clarity and education to avoid problems with so called 'non-IG insurers'.
- Explain to IMO Member States and other interested bodies such as the IOPC Funds the practical aspects of insurance related to marine liability insurance of insurance entities not belonging to the IG.

7. Low pressure fuel systems

More than one third of all fires on board vessels start in the engine room. Leaking oil pipes or equipment placed very closely to a potential ignition source – a so-called hot spot – has been identified as the cause of several of these engine room fires.

Measures to control such leaks are described in SOLAS Reg.II-2/4. The regulation includes, amongst others, requirements to

- use suitable materials in piping conveying flammable oils,
- minimise the number of joints in such piping,
- use screening and jacketed high pressure fuel oil pipes to prevent flammable oil sprays, and
- properly insulate hot surfaces.

While the risk of fires from high pressure systems has decreased with the implementation of new design rules for the fuel pipes in 2003, the low pressure pipes/systems remain a significant risk.

To further consider measures that would be effective to reduce the risk of fires from low pressure fuel systems and mitigate the consequences, IACS and IUMI formed a correspondence group comprised of technical experts from the membership of both associations.

Identification of hot spots, use of thermography, and proper installation of insulation were among the preventive measures identified for further discussion and review by the two associations. Based on this, IACS and IUMI recommend that SOLAS requirements are amended and have prepared a submission for a new output proposal to the IMO's Maritime Safety Committee.

Timeline / important dates

- Proposal for a new output at IMO MSC considered for MSC 110 in May 2025.

IUMI will:

- Take part in discussions on how to prevent and mitigate fire risks due to leakage from low pressure fuel systems.
- Propose a new output to amend SOLAs regulations.

8. Plastic litter

Over 300 million tons of plastic are produced every year for use in a wide variety of applications. At least 8 million tons of plastic end up in the oceans annually. Researchers estimate a plastic leakage into the ocean in 2040 of 29 million tons. Under the influence of UV radiation, wind, currents and other natural factors, plastic fragments into small particles, termed microplastics (particles smaller than 5 mm) or nanoplastics (particles smaller than 100 nm). Marine species ingest or are

entangled by plastic debris which causes severe injuries and death. Plastic pollution threatens food safety and quality, human health, and coastal tourism.

The main sources of marine plastic are land-based. However, ocean-based plastic originates primarily from the fishing industry, nautical activities and aquaculture. In 2018, the IMO's Marine Environment Protection Committee (MEPC) adopted the IMO Action Plan to address marine plastic litter from ships. It aims to enhance existing regulations and introduce new supporting measures to reduce marine plastic litter from vessels. One aspect of the Action Plan is the consideration of a compulsory mechanism to declare the loss of containers at sea.

The contents of lost containers contribute to marine litter. The carriage of so-called "***nurdles***" (pre-production plastic pellets) is a particular concern. Nurdles are in widespread use and large quantities of containers of this commodity are being shipped. In May 2021, the MV X-Press Pearl spilt 11,000 tonnes of plastic pellets off the shore of Colombo, Sri Lanka. If nurdles are lost overboard, the consequences to the environment are significant as they float and can be widely distributed. Marine wildlife often mistake nurdles for food, causing injury and entering the food chain.

In April 2022, the IMO Sub-Committee on Pollution Prevention and Response (PPR) supported the need for measures reducing the environmental risk of marine transport of microplastic particles and synthetic resin pellets. Concrete proposals included amendments to MARPOL 73/78 Annex III and classification according to section 2.9.3 of the IMDG Code "Environmentally hazardous substances (aquatic environment)" to strengthen stowage requirements for containers containing plastic pellets, and to develop guidance for handling pellets.

During PPR 11 held from 19 to 23 February 2024, the Sub-Committee agreed on recommendations for the carriage of plastic pellets by sea in freight containers. These recommendations emphasize the use of robust packaging to prevent leakage, clear identification of containers carrying plastic pellets, and appropriate stowage under deck or in sheltered areas to minimize environmental hazards. Additionally, the Sub-Committee developed guidelines for the clean-up of plastic pellets from ship-source spills, providing practical guidance for government authorities to ensure effective response actions. These guidelines cover contingency planning, response, post-spill monitoring, analysis, and cost recovery.

In October 2024, during MEPC 82, the Committee agreed to include the development of mandatory measures to prevent losses from the maritime transport of plastic pellets in the IMO Action Plan to address marine plastic litter from ships. The Committee instructed the PPR Sub-Committee to analyse potential mandatory instruments and their implications, with the aim of developing a regulatory framework to effectively reduce environmental risks associated with plastic pellet transport.

In summary, the IMO has advanced both non-binding recommendations and initiated steps toward developing mandatory measures to mitigate the environmental risks of plastic pellet transport by sea. The PPR 12 session in January 2025 is expected to further these efforts, with proposals from

the European Commission and other stakeholders contributing to the development of binding regulations.
All proposals align with the objective of establishing binding regulations as also pursued by IUMI. However, the approaches result in different allocation of responsibilities: one on the cargo interests, while the other focuses on the ship. As a result, IUMI does not explicitly favour either proposal.

The PPR Correspondence Group was also instructed to further progress work on reporting mechanisms for lost fishing gear. PPR was further instructed by the MEPC in July 2023 to consider a proposal for requiring a ship-specific plan for the on-board management of fishing gear.

Relevant authority / organizations and documents:

- **International Maritime Organization** (IMO), MEPC and PPR: (www.imo.org/en/OurWork/Environment/Pages/Default.aspxhave)
    - ***Resolution MEPC.310(73):*** Action Plan to address marine plastic litter from ships (MEPC73/19 - Annex 10), adopted 26 October 2018.
    - ***MEPC75/8/3:*** Report of the Correspondence Group on development of a strategy to address marine plastic litter from ships, 27 December 2019.
    - ***MEPC77/8/3:*** Follow-up work emanating from the action plan to address marine plastic litter from ships, submitted by Sri Lanka, 1 October 2021.
    - ***PPR10/13***: Report of the Correspondence Group on marine plastic litter from ships, 20 January 2023.
    - ***PPR10/INF.13:*** Guidelines on clean-up of plastic pellets from ship-source spills, submitted by Norway, South Africa, ITOPF and IG, 17 February 2023.

  MEPC.1/Circ.909 Recommendations for the carriage of plastic pellets by sea in freight containers

Timeline / important dates:

- Action plan to address plastic littler from ships adopted by IMO, October 2018
- Ongoing work in MEPC and PPR (Sub-)Committees

IUMI will:

- Participate in IMO Working Groups and Correspondence Groups to communicate marine insurers' positions regarding safe packaging of plastic pellets.
- Supports mandatory requirements for the safe carriage of plastic pellets in containers.

9. Safe decarbonisation and alternative fuels

Climate change is considered one of the most pressing issues of our time. It has also been identified by IUMI as a major concern to marine insurers. The effects of global warming are already evident and are changing the nature of the insured assets. The frequency of weather-related catastrophes

has increased significantly which drives up losses and leaves some assets uninsurable. The potential impact of climate change is therefore a fundamental issue for regulators.

The shipping sector accounts for approx. 3% of global CO_2 emissions. International agreements on the need to combat climate change require the reduction of greenhouse gas emissions from shipping. In addition to regulatory pressures from the IMO, other stakeholders such as banks, charterers and the broader public are setting requirements for the environmental performance of vessels, for instance in connection with the financing of new ships and new chartering agreements. Therefore, the industry must examine low and zero carbon ship propulsion systems taking into account the entire value chain, not just the combustion cycle.

There is currently no agreement on which fuel or fuels will be favoured and there can be very little progress without political support for the necessary infrastructure which is internationally absent. Notwithstanding the imperative of the green energy transition, it is crucial for carriers to assess potential safety concerns associated with measures to reduce the carbon footprint. Proper risk management is critical and safety must not be an afterthought.

In April 2018, the IMO adopted the Initial IMO Strategy on the reduction of GHG emissions from vessels. A revised Strategy was adopted by MEPC 80 in July 2023, setting a well-to-wake target of net-zero GHG emissions by 2050. Interim goals were agreed with a 20% reduction by 2030 (compared with 2008), including a 40% carbon intensity reduction target and 5% uptake of net-zero technologies, fuel and/or energy savings, and 70% reduction by 2040. There was also an agreement in principle on a new GHG intensity fuel standard and possible price on GHG emissions. These new GHG measures should be developed in view of adoption in 2025 and entry into force from 2027.

The Fourth IMO GHG Study 2020 is the first IMO greenhouse gas study published since the adoption of the Initial IMO Strategy on reduction of GHG emissions from ships. It demonstrates that whilst further improvement of the carbon intensity of shipping can be achieved, it will be difficult to reach IMO's 2050 GHG reduction ambitions through energy-saving technologies and speed reduction of ships. Therefore, under all projected scenarios, in 2050, a large share of the total amount of CO_2 reduction will have to come from the use of low-carbon alternative fuels.

In February 2023, IUMI co-sponsored a proposal for a new output at the IMO to undertake a regulatory assessment of safety aspects associated with reducing GHG emissions from vessels in line with the Organization's strategy and to develop a road map to support the safe delivery of IMO's strategy. The proposal was agreed by the Maritime Safety Committee in June 2023 and continues in a Correspondence Group in which IUMI participates.

The Marine Environment Protection Committee (MEPC) adopted in June 2021 a measure demanding energy efficiency requirements on existing vessels starting from 2023, and the introduction of carbon intensity targets for vessels with a first reporting deadline in March 2024.

The IMO's Sub-Committee on Carriage of Cargoes and Containers (CCC) initiated in September 2021 the development of guidelines on the safety of vessels using hydrogen as fuel under the

International Code for Ships using Gases or Other Low-flashpoint Fuels (IGF Code). The guidelines address both liquefied and compressed fuel. The Sub-Committee plans to further develop and finalize the interim guidelines on hydrogen as fuel for approval at MSC 111 in 2026. In December 2024, the Maritime Safety Committee approved "Interim Guidelines for the safety of ships using ammonia as fuel" which had also been developed by the CCC Sub-Committee. MSC 109 further adopted amendments to the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases (IGC Code) to enable the use of ammonia as fuel on ammonia carriers. The amendments will enter into force 1 July 2026, but a circular was also approved to encourage voluntary early implementation.

The European Union is implementing its own legislation through their Fit for 55 package. In January 2024, the EU's Emissions Trading System (EU ETS) was extended to cover CO_2 emissions from all large ships (of 5000 gross tonnage and above) entering EU ports, regardless of the flag they fly. In addition, the package includes a requirement for owners to buy cleaner fuels and ports to ramp up supply of shore power and liquefied natural gas (LNG) as fuel.

A significant push for decarbonisation in the maritime industry is not only underway within regulatory authorities but also in form of various industry initiatives comprised of a diverse range of maritime stakeholders, e.g. the Poseidon Principles for Marine Insurance. These efforts are necessary as the existing fleet is going to be non-compliant with IMO requirements soon. Changes in vessel design, fuel and propulsion types, and infrastructure will affect the risk landscape for marine insurers going forward. Underwriters must be prepared to assess new risks and potential safety concerns. Moreover, they are likely to play a role as facilitators for decarbonisation by providing guidance and advice to their insureds.

An important aspect of using alternative fuels safely is not only a comprehensive review of risks associated with the new fuels and propulsion methods, but also thorough consideration of how human performance may be influenced by new equipment, new ways of collaboration, and new procedures and processes for bunkering. At the same time, conventional fuel types will be in use for the foreseeable future and until the transition period is concluded.

IUMI will:

- Increase awareness for alternative low and zero carbon fuel types and propulsion methods and contribute towards any necessary safety regulation amendments.
- Will support industry initiatives such as the Poseidon Principles for Marine Insurance which underpin the transition to zero emissions shipping.

10. Transport of electric vehicles (EVs)

In light of the drive to decarbonize all modes of transport, the number of new energy vehicles has been on the rise. The European Automobile Manufacturers Association (ACEA) has collected

passenger car registration data in the EU per fuel type which show a significant growth of alternative fuel vehicles (AFVs) registered. Electric vehicles (EVs) are projected to match the sales of internal combustion engine (ICE) vehicles by 2030, and to surpass them by 2040.

Battery electric vehicles are usually fitted with a lithium-ion traction battery which is encapsulated and shielded by the vehicle's body. The battery pack consists of various battery modules which in turn are comprised of several battery cells. The chemical process which produces electricity that can be used for propulsion of the EV takes place within the battery packs. The battery system is usually placed in the vehicle floor or undercarriage where it is protected from damage by an anti-crash frame.

Electric vehicles have extensive safety systems designed to automatically shut down the power and isolate the battery pack when a collision or a short circuit is detected. An important safety feature of EV battery packs are in-built battery management systems (BMS). The BMS monitors and controls the battery and is a crucial factor in ensuring EV safety. It safeguards both the user and the battery by ensuring that the cell operates within its safe operating parameters. It monitors the state of a cell as represented by parameters.

The state of charge (SoC) is an electrical cell or battery’s charge level compared to the total capacity of the cell or battery. Batteries at high SOCs have been shown to experience more violent reactions during thermal runaway. Testing has indicated that high SoC cells produce higher heat release rates, maximum temperatures, and concentrations of flammable and toxic gases during thermal runway events. However, while the SoC does affect the growth and peak heat release, it does not affect the total heat release. In the absence of international rules and regulations, it is recommended for the transport of EV onboard Pure Care and Truck Carriers (PCTCs) to keep the SoC as low as practically possible.

Despite this inherently safe design thermal runaway may occur if a cell is abused, e.g. by heat, mechanical damage or overcharge. Thermal runaway can also occur as a consequence of a cell or battery manufacturing error. When thermal runaway occurs, the cell is undergoing an unstable chemical reaction that is difficult to bring under control. At some point, the separator structure collapses and the electrodes touch, causing an internal short circuit and masses of heat, bringing the cell to ever higher temperatures and generating toxic and flammable gases. Cell heating will continue until the rise in temperature exceeds the heat that can be dissipated to the cell's construction. This released heat will then increase and start to affect other nearby battery cells. When the generation of heat becomes self-sustaining - the heat releases energy and the energy in turn releases more heat - the overheating propagates from cell to cell and the battery is in thermal runaway.

The safety standards integrated into EV traction batteries, including solid casings and the BMS, make the likelihood of damage to an EV battery pack and thermal runaway extremely low. However, in view of the low possibility for thermal runaway the significance of the BMS as incorporated into EVs is particularly relevant. These safety systems prevent the battery cells from over and under charging, and thus prevent thermal runaway. It is important to note that BMS are not incorporated into smaller capacity and less sophisticated vehicles such as electric bikes or scooters.

As statistics continue to be gathered, it is currently estimated that, in general, there are fewer fires from EVs compared with fires from conventional vehicles when compared over the same distance.

A thermal runaway in a Lithium-Ion battery is difficult to stop unless the firefighting agents are injected directly into the battery to enable efficient cooling. If a fire breaks out in an EV or in an ICEV (internal combustion engine vehicle), activities in support of early detection and verification/confirmation, early fire suppression and boundary cooling are critical actions to stop the spread of the fire to the battery and to adjacent vehicles.

A particularity of EVs is the risk of re-ignition which tends to be higher for a longer period than for ICEVs. Precautionary measures to avoid re-ignition of the traction battery must therefore be taken for an extended period after a fire has been extinguished.

IUMI published a recommendations and best practice paper in September 2023 which includes technical information about EVs as well as best practice for the safe transport of EVs on board PCTCs and roro vessels. The paper is currently being revised and updated to reflect the latest technological advances and research.

The IMO's Sub-Committee on Ship Systems and Equipment (SSE) has an agenda item titled "Evaluation of adequacy of fire protection, detection and extinction arrangements in vehicle, special category and ro-ro spaces in order to reduce the fire risk of ships carrying new energy vehicles" on the agenda and it was discussed at its 10th session in March 2024. The work continued in a Correspondence Group which will report to SSE 11 in 2025. IUMI participated in the CG and will participate in the SSE 11 meeting.

IUMI will:

- Be involved in the IMO's work to effect appropriate safety measures to address this new risk.

11. Transport of lithium-ion batteries (LIBs)

In light of the efforts to combat climate change and to reduce the dependence on fossil fuels, new sources of energy and energy storage systems are being developed and constantly evolve. This has led to the increased use of lithium-ion batteries (LIBs) in all kinds of electronic devices, appliances, battery energy storage systems (BESS) and small vehicles. Unlike the LIBs incorporated in BESS and in electric cars, smaller devices which include LIBs do not have a battery management system which ensures that the battery operates within its safety parameters.

This section will focus on LIBs carried as cargo and LIBs within electronic devices. The peculiarities to consider when transporting BESS are not addressed since currently only limited knowledge is available on risks and loss prevention measures associated with their carriage.

With the number of LIBs in use growing, they are being shipped as cargoes across all modes of transport. This includes new, used and damaged batteries as well as electronic devices. If such cargoes are not handled, packaged, classified and declared correctly, they can be hazardous to people, property and the environment.

A risk associated with LIBs is thermal runaway (TR): Under certain conditions such as electrical abuse, heat, or mechanical abuse, an increase in the internal temperature of a lithium-ion cell can be triggered. This can initiate reactions which release heat, i.e. causing a heat-temperature loop. If the heat does not dissipate, the battery cell temperature will increase further, thereby accelerating the process of heat release. The battery enters an uncontrollable self-heating state. TR can affect adjacent cells and nearby materials, thus causing fire. In addition to the fire risk, TR reaction products also contain toxic substances. The toxicity characteristics applicable to potential gas clouds and their residues remain after a fire has been extinguished. If TR occurs, it is important to consider that even if the flames have been suppressed, this may not suffice to interrupt/stop the TR chemical reaction. Due to such risks, LIBs are classified as Class 9 dangerous goods. This means that they are subject to regulations on packaging, labelling, quantity limits, training, and reporting.

To ensure the safe handling of LIBs in the global supply chain it is crucial to comply with international safety regulations. Stakeholders involved in shipping or storing of LIBs must be aware of relevant information and communicate it to all those involved in the handling of the cargo. Guidance is included in the International Maritime Dangerous Goods (IMDG) Code, the Code of Practice for Packing of Cargo Transport Units (CTU Code), the Cargo Stowage and Securing (CSS) Code and the CINS Lithium-ion Batteries in Containers Guidelines. Training for staff involved with the handling of these cargoes is crucial to ensure they are aware of the risks and know how to handle them in case of an incident.

Relevant authority / organisations and documents

- Cargo Incident Notification System (CINS): Lithium-ion Batteries in Containers Guidelines, March 2023
- IATA Battery Guidance Document, Revised for the 2025 Regulations

IUMI will:

- IUMI will be support the development of appropriate guidelines and safety measures to address the risks associated with the carriage of LIBs.

STANDING ITEMS

12. Maritime security / piracy

The world is facing a new era of instability in which the rules based order which has underpinned global trade and the social order since 1945 is under threat from several directions. UNCLOS is being tested and clashing territorial ambitions are posing difficult legal and practical questions to which there is no clear answer.

Gaza/Red Sea

The conflict situation in Gaza has continued for over a year and the region remains highly unstable. The insurgent Houthis chose to attack international shipping in a show of support for the Palestinians. This has resulted in around 50% of all transits being re-routed away from Suez. NATO supported shipping via Operation Prosperity Guardian and Poseidon Archer whilst the EU intervened through Operation Aspides which provided an escort service to some vessels when possible. IUMI assisted Aspides with their guidance to shipping. Since the US election in November, attacks on shipping have reduced but the threat endures. Trading and underwriting in the area remain subject to high levels of risk and uncertainty where political motives clash with commercial operations.

Ukraine

The conflict continues with no end in sight. Despite dogged resistance by Ukraine, and an unprecedented regime of sanctions, Russia's strategic goals remain unchanged; they seek total control over Ukraine and appear undeterred by very significant casualties and economic damage. The European strategic picture has been recast with the continent recognizing the downside of oil and gas reliance on a country with contrasting strategic ambitions.

Baltic

Developments in the Baltic are perhaps the most notable. Following the addition of Sweden and Finland to NATO there have been a number of sub-sea cable incidents involving Russian and Chinese linked ships. NATO countries have decided to launch "Baltic Sentry" which will involve the deployment of defensive patrols by frigates, planes and drones. This will receive support from NMCSUI, the "cell", a specific knowledge centre at MARCOM which is co-ordinating action on undersea infrastructures and response.

Piracy

The shipping Round Table is working to update Best Management Practice (BMP) 5, but BMP 5 remains in force for now. BMP5 comprises a useful and comprehensive guidance which introduces effective measures for the protection of crew, vessels and cargo while transiting the Red Sea, the Gulf of Aden, the Indian Ocean and the Arabian Sea. BMP WA remains in force for Vessels & Mariners Operating Off the Coast of West Africa including the Gulf of Guinea.

Q6099, the maritime security planning chart for the Indian Ocean has now been supplemented with Q6112 which covers Karachi to Hong Kong. Both provide routeing information and contact details for masters.

In the Gulf of Guinea, the IMB continues to seek continued, robust regional and international naval presence as a deterrent to address piracy and kidnapping. Nigeria's Deep Blue Project and the Gulf of Guinea Maritime Collaboration Forum are complementary initiatives, created to support the fight against piracy in the region.

Relevant authority / organisations and documents

- **International Maritime Organization (IMO)**
  - ***Global Integrated Shipping Information System (GISIS):*** Recent reported incidents of piracy & armed robbery.
  - ***MSC102/10/3:*** Security in the Gulf of Guinea, submitted by ICS, BIMCO, OCIMF, INTERTANKO and INTERCARGO, 10 March 2020.
  - ***Circular Letter No. 4382:*** Piracy in the Gulf of Guinea, 10 February 2021.
  - ***Resolution A.1069(28):*** Prevention and suppression of piracy, armed robbery against ships and illicit maritime activity in the Gulf of Guinea, 15 December 2021.
  - ***MSC106/INF.10:*** Removal of the Indian Ocean High Risk Area, submitted by ICS, BIMCO, OCIMF, INTERTANKO, INTERCARGO and IMCA, 22 August 2022.
- **BMP5:**
  - Best Management Practices to Deter Piracy and Enhance Maritime Security in the Red Sea, Gulf of Aden, Indian Ocean and Arabian Sea, June 2018.
- **BIMCO's GUARDCON contract**
  - ***IGP&I GUARDCON West Africa*** – IG clubs' version including the recommended amendments in Circular 1, 9 April 2014.
- **European Union**:
  - EU Maritime Security Factsheet: The Gulf of Guinea, 25 January 2021.
- **EU Naval Force (EU NAVFOR)** – Operation Atalanta.
- **ICC International Maritime Bureau – Piracy Reporting Centre**
- **Maritime Security Centre Horn of Africa (MSCHOA)**
- **Joint War Committee (JWC)**: Listed areas.
- **IUMI**: Position Paper - Piracy and its suppression, 29 January 2016.
- **Maritime Domain Awareness for Trade – Gulf of Guinea (MDAT-GoG)**
- **ICS, BIMCO & INTERTANKO:** Interim Guidance on Maritime Security in the Southern Red Sea and Bab Al-Mandeb, 24 January 2018.
- **BMP WA:**
  - Best Management Practices to Deter Piracy and Enhance Maritime Security off the Coast of West Africa including the Gulf of Guinea, 30 March 2020.
- **U.S. Coast Guard:** Port Security Advisory (1-20), 10 June 2020.

- **Benin:** Interministerial decree concerning means of protection of ships in territorial waters, 13 July 2020.
- **BIMCO, ICS, INTERTANKO, INTERCARGO & OCIMF:**
  - Joint statement: Increased security threats for vessels operating in the Gulf of Guinea, 21 October 2020.
  - Recommended risk mitigation measures, 5 January 2021.
- **OCIMF:** Guidance for the employment of private maritime security companies, October 2021.
- **NATO Shipping Centre.**
- **US MARAD:** Advisory 2022-003: Persian Gulf. Strait of Hormuz, Gulf of Oman, Arabian Sea, Gulf of Aden, Bab al Mandeb Strait, Red Sea and Eastern Indian Ocean – Threat to commercial vessels, effective date 30 August 2022 – 26 February 2023.
- **IUMI:** IUMI welcomes IMO initiative to free vessels trapped in Ukrainian ports, 13 February 2023.
- **Industry associations:** Joint open letter to UN on seafarers trapped in Ukraine, 20 February 2023.

Timeline / important dates

- EU Naval Force Operation Atalanta extended until 31 December 2024.
- Indian Ocean High Risk Area no longer in place from 1 January 2023.

IUMI will:

- Monitor and inform IUMI membership of new developments.
- Strongly support implementation of BMP5 and consider amendments and/or more suitably adapted versions for new areas/threats as and when appropriate.
- Support implementation of ISO PSA 28007 as the sole standard when determining rules for the use of force.
- Endorse guidelines issued by BIMCO and ICS for vessels and crews.
- Encourage governments to support counter-piracy operations through naval task forces and other means of support off the Horn of Africa.
- Encourage owners and insurers to remain vigilant in the Indian Ocean.
- Support all efforts to find a lasting solution to ensure the safe passage of vessels and crew in the Strait of Hormuz and Persian Gulf.

13. Sanctions

International sanctions are front and centre to the major economic powers' political strategies and objectives. Shipping as a key cog to the global economy is an obvious sector to be adversely impacted by rises in geopolitical tensions. While sanctions are nothing new, the targeting of financial services have demonstrated the need for marine insurers to keep up to date with new sanction regimes and how to comply with them.

In recent years the application of unilateral sanctions, i.e. without broad, international consensus, has escalated significantly, as has the potential over-reach by governments to try and control the actions of entities trading in their country or using their currency but not directly sanctioned by them – the 'secondary sanctions' phenomenon. The increasing use of 'tit-for-tat' sanctions between the major trading nations further raises the political temperature and difficulties for internationally focused industries such as shipping.

There has been an increasing focus by sanctions authorities on the maritime sector, with pressure on owners, operators and insurers to adopt ever more extensive due diligence and compliance checks in order to manage evolving and complex risks. The May 2020 guidance Sanctions Advisory by OFAC, the Department of State and the U.S. Coast Guard was intended to reshape all aspects of maritime industry behaviour and touches upon fundamental issues for our community – for instance, AIS manipulation, know your customer, supply chain risk, information sharing with counterparties and the recommended use of insurance policy provisions. In July 2020, the UK sanctions regulator, OFSI, followed suit.

Since then we have seen the implementation of a sanctions regime against Russia on a scale never previously seen. These measures include the Oil Cap which was intended to reduce oil revenue to Russia and simultaneously keep oil flowing to non-G20 countries. The effect has been to produce an independent Russian tanker fleet and to largely remove G20 participation in Russian oil of any kind. It has also raised unanswered legal questions around oil spills involving sanctioned vessels or cargo. The International Group and others have drawn attention to the risks from the aging tankers employed by Russia, particularly when transiting narrow straits.

It is beyond the scope of this document to analyse specific sanctions measures or regimes except to make the wider point that sanctions measures are updated on an almost daily basis across multiple jurisdictions, which require continued due diligence by those in the shipping sector. Moreover, in some cases, sanctions requirements are either ambiguous or conflict across jurisdictions.

Insurers maintain exhaustive checks and systems to avoid insuring sanctioned entities in the first place, or paying claims where sanctions are introduced mid-policy term. Insurance policies will generally include as standard a sanctions exclusion clause, in addition to provisions, both implied and expressed, around illegal activity by the insured. But the speed of sanctions developments and differences in approaches and legislation across jurisdictions is a challenge. Furthermore, secondary sanctions can leave both insurers and their clients in the difficult situation of having competing sanctions measures in place, particularly so where there is the 'threat' of potential sanctions should the parties pursue what may be an otherwise valid commercial contract. Moreover, as the sanctions threat evolves so does the increasing technology employed by bad actors to circumvent measures – AIS manipulation being the best example but also including physical manipulation of the vessel, GNSS spoofing and falsification of documents.

The list below, while not exhaustive, indicates where information can be found from four key sanction regimes.

Key sanction regimes – information links

- **United Nations:**
  - Security Council - General Information about Sanctions
- **United States of America:**
  - U.S. Office of Foreign Assets Control (OFAC) Sanctions List Search
  - U.S. Treasury OFAC Sanctions Programs
  - U.S. Treasury OFAC Recent Actions
  - OFAC Specially Designated Nationals (SDN) List
  - OFAC Guidance to address illicit shipping and sanctions evasion practices (14 May 2020)
- **European Union:**
  - EU Consolidated list of sanctions
  - EU Sanctions Map
- **United Kingdom:**
  - HM Treasury – Financial sanctions targets by regime
  - UK Office of Financial Sanctions Implementation
  - OFSI Financial sanctions guidance for entities and individuals operating within the maritime shipping sector (December 2020)
  - Lloyd's Marine sanctions guidance – Enhanced Due Diligence measures
- **IUMI:**
  - OFAC webinar, 10 June 2020
  - Sanctions update webinar (HFW and Windward), 8 December 2021
  - OFAC webinar, 24 January 2024
- **BIMCO:** Sanctions clause for container vessel time charter parties 2021.
- **China**: Anti-foreign sanctions law necessary to fight hegemonism, power politics: official.

Glossary of abbreviations

ABS – American Bureau of Shipping
AFV – Alternative Fuel Vehicle
AIFTA – ASEAN-India Trade Area
AKFTA – ASEAN-Republic of Korea Free Trade Agreement
AMD – Association Mondial de Dispacheurs
ASEAN – Association of Southeast Asian nations
BBNJ – Biodiversity Beyond National Jurisdiction
BMP – Best Management Practice (BMP WA – Best Management Practice West Africa)
BRI – Belt and Road Initiative (People's Republic of China)
C – Council (IMO)
CCC – Sub-Committee on Carriage in Cargoes and Containers (IMO)
CFLII – Cargo Fire and Loss Innovation Initiative
CG – Correspondence Group
CIMAC – International Council on Combustion Engines
CINS – Cargo Incident Notification System
CIRM – Comité International Radio-Maritime
CLC – Civil Liability Convention
CLIA – Cruise Lines International Association
CMF – Combined Maritime Forces
CMI – Comité Maritime International
COLREG – Convention on the International Regulations for Preventing Collisions at Sea
CPTPP – Comprehensive and Progressive Agreement for Trans-Pacific Partnership
CTU Code – Code of Practice for Packing of Cargo Transport Units
DBI – The Danish Institute of Fire and Security Technology
DG MOVE – Directorate-General Mobility and Transport (EC)
EC – European Commission
ECA – Emission Control Area
ECSA – European Community Shipowners' Associations
EEA – European Economic Area
EEXI – Energy Efficiency Existing Ship Index (IMO)
EFTA – European Free Trade Association
EIOPA – European Insurance and Occupational Pensions Authority
EMASOH – European Maritime Surveillance Mission in the Strait of Hormuz
EMSA – European Maritime Safety Agency
ENISA – European Network and Information Security Agency
ESG – Environmental, Social and Governance
ETS – Emission Trading System (EU)
EU – European Union
EU NAVFOR – EU Naval Forces
FAL – Facilitation Committee (IMO)
FIATA – International Federation of Freight Forwarders Association
FONASBA – The Federation of National Associations of Ship Brokers and Agents

FTA – Free Trade Agreement
GDP – Gross Domestic Product
GHG – Greenhouse Gas
GNSS – Global Navigation Satellite Systems
GoG – Gulf of Guinea
HTW – Sub-Committee on Human element, Training and Watchkeeping (IMO)
IACS – International Association of Classification Societies
IAPH – International Association of Ports and Harbors
ICS – International Chamber of Shipping
IFSMA – International Federation of Shipmasters' Associations
IG – International Group of P&I Clubs
IMB – International Maritime Bureau
IMDG Code – International Maritime Dangerous Goods Code
IMO – International Maritime Organization; a United Nations specialized agency
INTERCARGO – International Association of Dry Cargo Shipowners
InterManager – international association of ship and crew managers
INTERTANKO – International Association of Independent Tanker Owners
IPTA – International Parcel Tankers Association
ISM Code – International Safety Management Code
ISPS Code – International Ship and Port Facility Security Code
ISO – International Organization for Standardization
ISU – International Salvage Union
ITF – International Transport Workers' Federation
IUU – Illegal, unreported and unregulated fishing
LEG – Legal Committee (IMO)
MARPOL – International Convention for the Prevention of Pollution from Ships
MASS – Maritime Autonomous Surface Ships
MEPC – Marine Environment Protection Committee (IMO)
MSC – Maritime Safety Committee (IMO)
MSCHOA – Maritime Security Centre Horn of Africa
MR – Mutual Recognition (ROs)
NATO – North Atlantic Treaty Organization
NCSR – Sub-Committee on Navigation, Communications and Search and Rescue (IMO)
OCIMF – Oil Companies International Maritime Forum
OFAC – Office of Foreign Assets Control (United States)
OFSI – Office of Financial Sanctions Implementation (United Kingdom)
ORRA – Ocean Risk Alliance
Polar Code – International Code for Ships Operating in Polar Waters
POLARIS – Polar Operational Limit Assessment Risk Index System
PoR – Places of Refuge
PPMI – Poseidon Principles for Marine Insurance
PPR – Sub-Committee on Pollution Prevention and Response (IMO)
PSA – Port Security Advisory
PSI – Principles for Sustainable Insurance (UNEP FI)
RCEP – Regional Comprehensive Economic Partnership (between 15 Indo-Pacific nations)

ReCAAP ISC – Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia Information Sharing Centre
RO – Recognised Organisation
ROADSEC – European road freight transport sector security guidelines
SAE – Society of Automotive Engineers
SDC – Sub-Committee on Ship Design and Construction (IMO)
SDG – Sustainable Development Goals (UN)
SOLAS – International Convention for the Safety of Life at Sea
SSE – Sub-Committee on Ship Systems and Equipment (IMO)
STCW – International Convention on Standards of training, Certification and Watchkeeping for Seafarers
TAPA – Transport Asset Protection Association
TEN-T – Trans-European Transport Network (EC)
UI – Unified Interpretation (IACS)
UN – United Nations
UNCAC – Convention Against Corruption (UN)
UNCLOS – Convention on the law of the seas (UN)
UNEP FI – United Nations Environment Programme Finance Initiative
UR – Unified Requirement (IACS)
WSC – World Shipping Council