



IUMI Policy Agenda





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UNDER REVIEW

1. Arctic sailings

Brief description

Ice conditions make Arctic sailings a relevant option for more commercial vessels transiting between Europe and Asia and the number of cruise ships in polar waters are on the rise. Ice conditions, the role of class, ship design, remoteness, support networks, availability of icebreakers, SAR, and experience and training of crew are amongst the relevant issues for underwriters in assessing this risk.

In November 2014, the IMO Maritime Safety Committee (MSC) adopted the International Code for Ships Operating in Polar Waters and the associated new SOLAS chapter XIV. The Maritime Environmental Protection Committee (MEPC) adopted the MARPOL amendments in May 2015. Training requirements within the STCW Convention and the Code for officers and crew on board ships operating in polar waters were adopted by MSC in 2016.

The Code entered into force 1 January 2017. The safety part of the Polar Code applies to ships certified under SOLAS, i.e. cargo ships of 500 GT or more and all passenger ships. Ships constructed on or after 1 January 2017 shall comply with the safety requirements. Ships constructed before 1 January 2017 shall comply by the first intermediate or renewal survey occurring after 1 January 2018. All existing and new ships certified under MARPOL shall comply with the environmental requirements as of 1 January 2017. Polar Code amendments to STCW took effect on 2 July 2018.

Guidelines for the development of a Polar Water Operational Manual was published by International Chamber of Shipping (ICS) and Oil Companies International Maritime Forum (OCIMF) in November 2019.

An interim guidance on methodologies for assessing operational capabilities and limitations in ice (POLARIS) was approved by MSC 96 in May 2016. The guidance shall be reviewed four years after the entry into force of the Polar Code in order to make any necessary amendments based on experience gained. Member States and international organizations are invited to report on their experience with the use of POLARIS.

In November 2020, MEPC approved a ban on the use of heavy fuel oil in the Arctic region from 1 July 2024. For vessels with double hull, the entry into force date is 1 July 2029. There is also an option for states with an Arctic coastline to waive the requirement for ships flying its flag and operating in its water until 1 July 2029. The MARPOL amendments are expected to be adopted by MEPC 76 in June 2021.

Currently, there is a consideration for an instrument to address non-Convention vessels operating in polar waters. MSC 98 agreed in June 2017 that the output to “Safety measures for non-SOLAS ships operating in polar waters” is a matter of urgency and moved this to its agenda for the 2018-2019 biennium. MSC 99 instructed in May 2018 the Sub-Committee on Ship Design and Construction (SDC) to develop recommendatory safety measures for fishing vessels of 24m in length and over, and pleasure yachts above 300 gross tonnage not engaged in trade. SDC 6 resolved in February 2019 to develop two sets of guidelines for fishing vessels and pleasure

yachts, respectively. The guidelines were finalized by SDC 7 in February 2020, and will be submitted to MSC 103 for approval. In November 2020, MSC 102 instructed SDC to also consider safety guidelines for pleasure yachts engaged in trade and cargo ships, both of 300 GT and above and less than 500 GT, operating in polar waters.

To progress the work, MSC 101 instructed in June 2019 the Sub-Committee on Navigation, communications and Search and Rescue (NCSR) to consider the feasibility and consequences of applying chapters 9 and 11 of the Polar Code to non-SOLAS vessels and how best to enhance the safety of these vessels, including possible amendment of SOLAS and/or the Polar Code. In January 2020, NCSR agreed to progress the work in a correspondence group until NCSR 8 in 2021. The correspondence group has expressed a need to extend the output of this work beyond 2021.

As an interim measure, MSC 101 approved an Assembly resolution urging Member States to take steps, on a voluntary basis, to implement the safety measures of the Polar Code on non-SOLAS vessels.

IUMI participates in the Arctic Shipping Best Practices Information Forum of the Arctic Council that was formed in 2017. The Forum supports the implementation of the Polar Code, and a public web-portal is available with accurate information from authoritative sources including the Arctic States, intergovernmental organisations, classification societies, the shipping industry, marine insurers, and non-governmental organisations.

Relevant authority / organisations and documents

- **IMO MEPC & MSC** with input from Sub-Committees (HTW, SSE, NCSR)
 - **Polar Code:**
 - <http://www.imo.org/en/MediaCentre/HotTopics/polar/Pages/default.aspx>
 - Resolution MSC Res.385(94), adopted 21 November 2014.
 - SOLAS Ch. XIV (MSC Res.386/94).
 - MEPC 68/21/Add.1/Corr.2, adopted 15 May 2015.
 - MSC95/21/3: Request for data on incidents within polar waters, submitted by Iceland, New Zealand and South Africa, 24 March 2015.
 - SSE3/15/4: Additional performance and/or test standards in support of the implementation of the Polar Code, submitted by Argentina, the Marshall Islands, New Zealand, Norway and Vanuatu, 15 December 2015.
 - MSC.1/Circ.1519: Guidance on methodologies for assessing operational capabilities and limitations in ice (POLARIS), 6 June 2016.
 - MEPC70/17/4: Heavy fuel oil use by vessels in Arctic waters, submitted by FOEI, WWF, Pacific Environment and CSC, 22 July 2016.
 - MEPC71/14/4: Measures to reduce risks of use and carriage of heavy fuel oil as fuel by ships in Arctic waters, submitted by Canada, Finland, Germany, Iceland, Netherlands, Norway and the United States, 31 March 2017.
 - MEPC71/16/4: Current and projected vessel traffic in the Arctic: heavy fuel oil use and its alternatives, submitted by FOEI, WWF, CSC and Pacific Environment, 31 March 2017.
 - MEPC71/16/8: Comments on the document on the use of heavy fuel oil in the Arctic (MEPC71/16/4), submitted by Russia, 12 May 2017.

- [MEPC72/11/1](#): Proposal to ban heavy fuel oil use and carriage as fuel by ships in Arctic waters, submitted by Finland, Germany, Iceland, the Netherlands, New Zealand, Norway, Sweden and the United States, 2 February 2018.
- [MSC99/INF.12](#): Industry guidance on the development of a Polar Water Operational Manual, submitted by ICS and OCIMF 12 March 2018.
- [MSC100/7](#): Safety measures for non-SOLAS ships operating in Polar waters - Application of chapters 9, 10 and 11 of the Polar Code, submitted by Canada and New Zealand, 12 September 2018.
- [MSC100/WP.9](#): Safety measures for non-SOLAS ships operating in Polar waters, report of the Working Group, 6 December 2018.
- [MSC101/7/2](#): Consideration of feasibility and consequences of applying the requirements in chapters 9 and 11 of the Polar Code to non-SOLAS ships operating in polar waters, submitted by Chile, France, Marshall Islands, New Zealand, FOEI, WWF and Pacific Environment, 1 April 2019.
- [MSC.1/Circ.1612](#): Guidance for navigation and communication equipment intended for use on ships operating in polar waters, 14 June 2019.
- [MSC.1/Circ.1614](#): Interim guidelines on life-saving appliances and arrangements for ships operating in polar waters, 26 June 2019.
- [SDC7/4](#): Safety measures for non-SOLAS ships operating in Polar waters, report of the Correspondence Group, 1 November 2019.
- [PPR7/14](#): Development of measures to reduce risks of use and carriage of heavy fuel oil as fuel by ships in Arctic waters, report of the Correspondence Group, 14 November 2019.
- [A31/Res.1137](#): Interim measures for ships not certified under the SOLAS Convention operating in polar waters, 17 January 2020.
- [SDC7/WP.5](#): Safety measures for non-SOLAS ships operating in Polar waters, report of the working group, 5 February 2020.
- [PPR8/6](#): Development of guidelines on measures to reduce risks of use and carriage of heavy fuel oil as fuel, report of the Correspondence Group, 18 December 2020.
- [NCSR8/5](#): Safety measures for non-SOLAS ships – application of chapters 9 and 11 of the Polar Code, report of the correspondence group, 15 January 2021.
- [NCSR8/5/1](#): Response to the report of the correspondence group, submitted by FOEI, Pacific Environment and WWF, 12 February 2021.
- **Arctic Council** comprising Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden and the U.S. (www.arctic-council.org).
 - **Arctic Shipping Best Practices Information Forum web-portal:** <https://pame.is/arcticshippingforum>
 - [Guideline for Arctic Marine Risk Assessment](#), April 2020.
- **The Arctic Monitoring and Assessment Programme:** www.amap.no – status of, and threats to, the Arctic environment.
- **Arctic “Best Practice Declaration”.** IUMI letter of support 19 April 2013.
- **Arctic information database:** www.arctis-search.com (Centre for High North Logistics).
- **ArcticWeb:** www.arcticweb.com – provides information on offshore Arctic areas through access to public data sources in the Arctic region.

- **European Union:**
 - Joint EC Communication to the European Parliament and Council - JOIN(2016) 21 final: An integrated EU policy for the Arctic, 27 April 2016.
 - European Parliament report on an integrated EU policy for the Arctic, 8 February 2017.
 - SEDNA (Safe maritime operations under extreme conditions) research project (<https://www.sedna-project.eu/>)
- **U.S. Coast Guard:**
 - Arctic Strategy, May 2013.
 - Policy Letter No. 01-16: Guidelines for training of personnel on ships subject to the International Code for ships operating in Polar waters (Polar Code), 10 February 2016.
- **Swedish conference and workshop** March 2014:
<http://www.polar.se/en/articles/conference-report-sustainable-arctic-shipping-and-marine-operations>
- **Northern Sea Route Administration:**
 - http://asmp.morflot.ru/en/cefi_funksii/
 - Russian Government: Northern Sea Route Development Plan for the period until 2031, 21 December 2019.
- **Insurance industry:**
 - Lloyd's / Chatham House: Arctic Opening: Opportunity and Risk in the High North: <http://www.chathamhouse.org/publications/papers/view/182839> - 1 April 2012
 - Cefor: Arctic Sailings Check List: <http://cefor.no/Clauses/Arctic-Sailings-Check-List/> - October 2012.
 - Gard: Climate change creates a new trade route – and new risks: <http://www.gard.no/ikbViewer/web/updates/content/20738960/climate-change-creates-a-new-trade-route-and-new-risks> - 26 February 2014.
 - Marsh: Arctic shipping: Navigating the risks and opportunities, August 2014 <https://www.marsh.com/uk/insights/research/arctic-shipping-navigating-the-risks-and-opportunities.html>.
 - The Swedish Club: Ice – Advice for trading in the polar regions: <http://www.eyemag.se/core/main.php?SITEID=98b6c&PROJECTNR=4931> – 2014.
 - Skuld: Arctic checklist: <https://www.skuld.com/topics/navigation/geographical/arctic/arctic-checklist/> - 16 February 2015.
 - **IUMI: Position paper on Arctic sailings, 29 August 2018.**
- **ABS**: Navigating the Northern Sea Route Advisory: http://www.eagle.org/eagleExternalPortalWEB/ShowProperty/BEA%20Repository/References/Capability%20Brochures/NSR_Advisory - January 2014
- **US:**
 - Bureau of Safety and Environmental Enforcement & Bureau of Ocean Energy Management: Requirements for Exploratory Drilling on the Arctic Outer Continental Shelf, 20 February 2015.

- Government Accountability Office: Report to Congressional requesters – Maritime Infrastructure, April 2020.
- **CMI Polar Shipping Working Group / Hafnia Law Firm:** Report on the Legal Framework for Civil Liability for Vessel Source Oil Spills in Polar Regions, 2 February 2016.
- **Oil Companies International Marine Forum (OCIMF):** Northern Sea Route Navigation – Best Practices and Challenges, December 2017.
- **Northern Sea Route Information Office:** www.arctic-lio.com/
- **The Arctic Maritime and Aviation Transportation Infrastructure initiative:** www.articinfrastructure.com
- **People's Republic of China:** China's Arctic Policy, 26 January 2018.
- **ICS & OCIMF:** Guidelines for the Development of a Polar Water Operational Manual, November 2019.

Timeline / important dates

- Russian Northern Sea Route Administration established 15 March 2013.
- IMO Workshop on Safe Ship operations in the Arctic Ocean: 28 February 2014.
- IUMI PF Workshops 2014 & 2015.
- MSC 94: 17-21 November 2014: Adoption Polar Code and SOLAS Chapter XIV.
- MEPC 68: 11-15 May 2015: Adoption MARPOL amendments.
- MSC 95: 3-12 June 2015: Report on operational limitations in ice & approval STCW amendments.
- Arctic Coast Guard Forum: Joint statement on creating a strategic framework for an operationally-focused consultative organization, 10 June 2016.
- US / Canada: Ban on Arctic drilling in key Arctic and Atlantic offshore areas, 20 December 2016.
- Polar Code entered into force 1 January 2017, applying for new ships constructed after that date. Ships constructed before that date shall meet the relevant requirements by the first intermediate or renewal survey, whichever occurs first, after 1 January 2017. STCW amendments took effect from 1 July 2018.
- European Parliament vote: Resolution on the Arctic, 16 March 2017.
- SEDNA research project June 2017 – June 2021.
- SDC 6: 4-8 February 2019.
- MSC 101: 5-14 June 2019.
- Assembly: 25 November – 5 December 2019.
- NCSR 7: 13-24 January 2020.
- SDC 7: 3-7 February 2020.
- PPR 7: 17-21 February 2020.
- 4th annual meeting of the Arctic Shipping best Practices Information Forum, 24-25 November 2020.
- EU Arctic Policy: Public consultation 21 July – 10 November 2020.
- MSC 102: 4-11 November 2020.
- MEPC 75: 16-20 November 2020.

- NCSR 8: February 2021.
- FAL 45: April 2021 - Final consideration of initial review of FAL convention
- MSC 103: 3-14 May 2021.
- Possible entry into force of amendments (if agreed) to SOLAS and/or the Polar Code for non-SOLAS vessels: 1 January 2024.
- MEPC 76: 14-25 June 2021.

IUMI will:

- Participate in discussions with industry, IMO and coastal states on necessary standards and infrastructure in Polar waters.
- Support the urgent consideration for a mandatory instrument to address non-SOLAS vessels operating in polar waters.
- Participate in the Arctic Shipping Best Practice Information Forum, which is responsible for the information web-portal launched to support implementation of the Polar Code.

2. Autonomous / unmanned transports

Brief description

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.

Numerous industry and government-run projects are driving the development, but for unmanned vessels to become a reality the regulatory framework must also be in place. Requirements concerning the person having command of a vessel, sufficient manning, training and proper lookout must be considered in international conventions (SOLAS, STCW, COLREG). In June 2017, IMO's Maritime Safety Committee (MSC) agreed to undertake a regulatory scoping exercise to determine the extent of the need to amend the regulatory framework to enable the

safe, secure and environmental operation of maritime autonomous surface ships (MASS) within the existing IMO instruments. The results from this exercise will be discussed by MSC in May 2021.

In December 2018, MSC 100 agreed to maintain the initial four degrees of autonomy although focusing on levels two and three: (2) Remotely controlled ship with seafarers on board and (3) Remotely controlled ship without seafarers on board. A web platform has also been established.

Interim guidelines for trials of MASS were finalized by MSC 101 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 2018, the IMO Legal Committee (LEG) agreed to include a new output entitled “Regulatory scoping exercise and gap analysis of conventions emanating from the Legal Committee with respect to Maritime Autonomous Surface Ships (MASS)”, with a target completion year of 2022.

There are also several other initiatives relating to legislation and insurance of autonomous vessels; Comité Maritime International (CMI) has formed an International Working Group on Unmanned Vessels, Association Mondiale de Dispatcheurs (AMD) are considering how the adoption of unmanned ships may impact marine insurance claims and the application of general average, ISO is considering a way to characterize and classify ship autonomy, and International Group of P&I Clubs has formed a working group to consider liability matters. BIMCO is drafting a standard contract for autonomous vessels, adapted from the SHIPMAN 2009 agreement, titled AUTOSHIPMAN and expected to be published in 2021. The contract will include provisions for autonomous vessel-related services and the operation of a remote control centre.

Trucks

Freight shipments with trucks driving in “trains” along the highway are now being tested. Truck platooning, in which two or three trucks drive in a column connected by Wi-Fi with the first truck determining the speed, enables shorter gaps between trucks. This frees up space for other vehicles, and is expected to ensure better traffic flow and speed of deliveries. Truck platooning is also said to realise up to ten per cent fuel savings, as well as reducing CO² emissions.

The European Truck Platooning Challenge demonstration project was successfully completed in spring 2016. While the test showed that technology already has come a long way, it also made it clear that in going forward there is a need for EU harmonisation of rules of the road and rules for drivers.

In January 2017, Singapore Ministry of Transport and PSA Corporation signed agreements with two automotive companies to design, develop and test an autonomous truck-platooning system for use on Singapore’s public roads (between ports).

In 2019, ZPMC Smart Solutions Group completed a phased R&D testing of five all-electric unmanned vehicles in the Tangshan Port Container Terminal (China).

Relevant authority / organisations and documents

- **IMO:**
 - MSC95/INF.20: The IMO regulatory framework and its application to Marine Autonomous Systems, submitted by the United Kingdom, International Associations of Institutes of Navigation (IAIN) and the Institute of Marine Engineering, Science and Technology (IMarEST), 14 April 2015.
 - MSC98/20/2: **Maritime Autonomous Surface Ships, Proposal for a regulatory scoping exercise, submitted by Denmark, Estonia, Finland, Japan, the Netherlands, Norway, the Republic of Korea, the United Kingdom and the United States, 27 February 2017.**
 - MSC98/22/7: Impact of new and advanced technologies to maritime transport and the regulatory framework, submitted by Denmark, Estonia, Finland, Japan, Norway, Singapore, Sweden and IMarEST, 28 March 2017.
 - MSC98/20/13: Comments on MSC98/20/2, submitted by the International Transport Workers' Federation (ITF), 13 April 2017.
 - MSC99/INF.3: Final report – analysis of Regulatory Barriers to the use of Autonomous Ships, submitted by Denmark, 18 January 2018.
 - LEG105/11/1: **Proposal for a regulatory scoping exercise and gap analysis with respect to Maritime Autonomous Surface Ships (MASS), submitted by Canada, Finland, Georgia, the Marshall Islands, Norway, the Republic of Korea, Turkey, CMI, ICS and P&I Clubs, 19 January 2018.**
 - MSC99/INF.5: Report of a survey on what maritime professionals think about autonomous shipping, submitted by IFSMA and ITF, 9 February 2018.
 - MSC100/INF.3: Regulatory scoping exercise for the use of maritime autonomous surface ships (MASS) – Initial review of IMO instruments under the purview of MSC, note by the Secretariat, 9 August 2018.
 - MSC100/5/1: Proposal for a classification scheme for degrees of autonomy, submitted by ISO, 31 August 2018.
 - LEG106/8/1: Outcomes of MSC 99 and MSC 100 regarding MASS, Secretariat, 11 January 2019.
 - LEG106/WP.5: Report of LEG Working Group on MASS, 29 March 2019.
 - MSC.1/Circ.1604: Interim guidelines for MASS trials, 14 June 2019.
 - ISWG/MASS1/6: Report of the ISWG MASS to the Maritime Safety Committee, 23 September 2019.
 - LEG107/8: Summary of results of analysis of IMO instruments under the purview of the Legal Committee, submitted by CMI, 13 December 2019.
 - MSC102/5/16: Summary of result analyses of IMO instruments under the purview of the Maritime Safety Committee, submitted by CMI, 11 February 2020.
- **University of Gent**: Article in Journal of International Maritime Law on the law of unmanned merchant shipping – an exploration, Professor Dr Eric Van Hooydonk, 2014
- **UK Marine Industries Alliance - Maritime Autonomous Systems Regulatory Working Group (MASRWG):**
 - Code of practice – 2nd version, 2 November 2018.
 - <http://www.ukmarinealliance.co.uk/MAS>

- **Advanced Autonomous Waterborne Applications Initiative (AAWA):**
<https://www.utu.fi/en/units/law/research/research-projects/Pages/aawa.aspx>
- **University of Southampton:** Presentation on the navigation of unmanned ships and the collision regulations, Robert Veal, Research Fellow, Institute of Maritime Law.
- **Maritime Unmanned Navigation through Intelligence in Networks (MUNIN):**
<http://www.unmanned-ship.org/munin/>
- **Norwegian Forum for Autonomous Vessels:** <http://nfas.autonomous-ship.org/>
- **Denmark:**
 - Pre-study. Cooperation between Danish Maritime Authority & the Technical University of Denmark (MSC 98/INF.13).
 - Danish Maritime Authority/Rambøll/Core Advokatfirma: Analysis of regulatory barriers to the use of autonomous ships, December 2017.
- **The European Truck Platooning Challenge:**
<https://www.eutruckplatooning.com/default.aspx>
- **ONE SEA Autonomous Maritime Ecosystem (Finland):** Finnish Maritime Industries, ecosystem for autonomous marine transport in the Baltic Sea in 2025.
- **European Parliament:** Resolution on Civil law rules on robotics, 16 February 2017.
- **CMI:** International Working Group on “Maritime Law for unmanned craft”; MSC 99/INF.8: Work conducted by the CMI WG, 13 February 2018.
- **Centre for Autonomous Marine Operations and Systems (NTNU AMOS),** Norwegian University of Science and Technology: Risk management of autonomous marine systems and operations, Paper for OMAE17 in Trondheim – Norway, June 2017.
- **Classification societies:**
 - **Lloyd’s Register:** Cyber-enabled ships – ShipRight procedure assignment for cyber descriptive notes for autonomous & remote access ships, Version 2.0, December 2017.
 - **Bureau Veritas:** Guidelines for Autonomous Shipping, December 2017.
 - **DNV GL:** Autonomous and remotely operated ships (DNVG-CG-0264), September 2018.
- **CORE Advokatfirma & Cefor:** Maritime autonomous surface ships – zooming in on civil liability and insurance, 10 December 2018.
- **ShippingLab:** <http://shippinglab.dk/>
- **European Maritime Safety Agency (EMSA):** Study of the risks and regulatory issues of specific cases of MASS (SAFEMASS), DNV GL report, 25 March 2020.

Timeline / important dates

- MUNIN: 2012 until August 2015.
- AAWA: March 2015 until June 2017.
- CMI questionnaire to National Maritime Law Associations, 29 March – 31 May 2017.
- IUMI webinar: Legal aspects, Dr M. Guth, Dabelstein & Passehl, 11 May 2017.
- MSC 98: 7-16 June 2017.
- Unmanned Cargo Ship Development Alliance, formed 28 June 2017.
- MSC scoping exercise June 2017 - June 2020.

- LEG 105: 23-25 April 2018.
- EU research programme Horizon 2020: 2018-2020.
- LEG scoping exercise agreed April 2018. Target completion year 2022.
- MSC 100: 3-7 December 2018.
- IUMI webinar: Update on regulatory developments for Maritime Autonomous Surface Ships (MASS), Dr L. Wiedenbach, ASD, 29 January 2019.
- IMO web platform: March 2019.
- FAL regulatory scoping exercise – final consideration and results, tbd
- MSC 103: 3-14 May 2021.

IUMI will:

- Monitor ongoing industry and government-run projects, and provide input as appropriate.
- Monitor scoping exercises performed 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.
- Participate in the LEG web platform working group.

3. Cyber risks

Brief description

The growing use and reliance on information technology, of data networks, transmissions and connectivity in the daily work within the marine and energy sectors increase their exposure to cyber related risks. Ransomware attacks may result in economic loss or costs of rebuilding lost data. Stand-alone ransomware insurance products are now available both within the marine and non-marine insurance markets to protect against this risk. Consequential damages to hull, cargo and third-party liabilities from a cyber-attack on board a vessel or mobile offshore unit poses a different and more costly risk. The limited data on the frequency, severity of loss or probability of physical damage, is a challenge to underwriters.

The risks can be either malignant or due to innocent breach caused by a lack of awareness or insufficient understanding about systems and how they interact with each other. Both need to be dealt with, starting with top-level commitment and the proper implementation of risk assessment procedures.

Techopedia² defines cyber-attacks as deliberate exploitation of computer systems, technology-dependent enterprises and networks. Cyber-attacks use malicious code to alter computer code, logic or data, resulting in disruptive consequences that can compromise data and lead to cyber

² <http://www.techopedia.com/definition/24748/cyberattack>

crimes, such as information and identity theft. Cyber-attack is also known as a computer network attack (CNA).

A successful cyber-attack can have several implications relevant to insurance: Loss of life, personal injury, pollution, loss of property, business interruption, loss of production, loss of data and loss of reputation. From a cargo perspective, there are in particular concerns related to the potential risks and implications of cyber-attacks directed at unmanned truck convoys and mega hubs.

According to results from a cyber security survey that was presented by BIMCO, Fairplay and ABS Advanced Solutions in September 2018, more than a fifth of the respondents had been a victim of a cyber related attack. 27% had never received any cyber security training, while only about half of the respondents had a business continuity plan in place.

The United States Coast Guard released its Cyber Strategy guidance document in June 2015. The document presents the agency's vision for operating in the cyber domain and outlines the agency's goals and objectives for its three strategic priorities: defending cyberspace, enabling operations and protecting infrastructure. In December 2016, the USCG published a cyber-security policy letter regarding the criteria and process for the reporting of suspicious activity and breach of security, and added cybersecurity to the list of security items covered by the 2002 Maritime Transportation Security Act (MTSA). This could also mean penalties of up to USD 25,000 per cyber preparedness violation. In mid-July 2017, the USCG announced a request for public comments to its Navigation and Vessel Inspection Circular (NVIC) 05-17: "Guidelines for addressing cyber risks at MTSA regulated facilities".

The EU Network and Information Security Directive (NIS) necessitates amongst others large ports and (static) maritime transport services in the EU to demonstrate that they have taken measures to manage cyber security risks. Companies are also required to report cyber incidents. Penalties for breaches can be substantial, and for instance the UK has announced that firms could face up to GBP 17 million fines if they fail to protect against cyber-attacks.

The ISO intends to complement the work on cybersecurity, using the ISO/IEC 27000 series.

IMO

IMO's Maritime Safety Committee (MSC) supported in November 2014 a Canadian / U.S. recommendation to develop voluntary guidelines on maritime cyber security practices. The "*Guidelines on maritime cyber risk management*" were approved in July 2017, and provide high-level recommendations on maritime cyber risk management to safeguard shipping from current and emerging cyber threats and vulnerabilities. Furthermore, the guidelines refer to additional guidance and standards, including the IUMI supported industry guidelines that are mentioned below.

In June 2017, MSC adopted a resolution on maritime cyber risk management in safety management systems. Member Governments are encouraged to ensure that cyber risks are appropriately addressed in safety management systems no later than the first annual verification of the company's Document of Compliance after 1 January 2021.

Industry guidelines

In January 2016, an industry group published new "*industry guidelines on cyber security onboard ships*". A 2nd edition of the guidelines was published in July 2017, with the inclusion of among

others a new paragraph on insurance cover. Version 4 was published in December 2020. IUMI is actively involved in the development, and co-sponsored a proposal requesting IMO's Maritime Safety Committee (MSC) to take the industry guidelines into account when considering measures to enhance maritime cyber security.

Unlike other international standards and guidance on cyber security, the industry guidelines focus on the distinctive issues on board ships. Rather than technical guidance, the guidelines are designed for use by owners, managers and seafarers to develop understanding and awareness of key aspects of cyber security. The company will find support to establish procedures, plans and instructions, including checklists as appropriate, for relevant key shipboard operations that will be complementary to existing security and safety risk management requirements contained in the ISM and ISPS Codes.

In December 2017, BIMCO and Comité International Radio-Maritime (CIRM) presented a proposed industry-wide standard for software maintenance. The aim is to reduce the number of cyber-attacks on vessels, and the support of organizations and IMO Member States is encouraged. The International Standardization Organization (ISO) was approached, and this has resulted in draft standard ISO 24060 that focuses on the concept of a "Ship Software Logging System (SSLS)", specifying requirements for a tool to automatically log all information about software installed on shipboard Operational Technology equipment. If approved, the standard could serve as a technical tool to support implementation of the CIRM/BIMCO industry standard.

IACS

IACS founded in June 2016 a Cyber Systems Panel. The Panel is focusing on developing recommendations as a first step, to be followed later by new unified requirement on system integration for safety critical shipboard systems. The Panel is also exploring a possible certification scheme for software providers for essential systems by IACS members. An update of UR E 22, covering on board use and application of programmable electronic systems, is under consideration by a project team. IUMI is among the industry partners in a joint working group with IACS on cyber systems.

During September and December 2018, the Cyber Panel published its twelve initial Recommendations addressing; Software maintenance, Manual backup/local control capabilities, Contingency Post Failure, Network architecture, Data assurance, Physical security, Network security, Vessels system design, Inventory list of computer-based systems, Integration, Remote update / access, and Communication and interfaces. In May 2020, IACS published a Single Standalone Recommendation On Cyber Resilience (No. 166), which consolidates the previous 12 recommendations and applies to the use of computer-based systems which provide control alarm, monitoring, safety or internal communication functions subject to the requirements of a classification society. IACS plans to publish three documents containing new interconnected cyber focused unified requirements in the second half of 2021.

Relevant authority / organisations and documents

- **IMO – Maritime Safety Committee (MSC), Sub-Committee on Navigation, Communication and Search and Rescue (NCSR) & Facilitation Committee (FAL):**
 - MSC95/4/1: Industry guidelines on cyber security on board ships, submitted by ICS, BIMCO, INTERTANKO and INTERCARGO, 5 March 2015.

- MSC95/4/2: International Ship and Port Facility Security (ISPS) Code cyber security provisions, submitted by Canada, 18 March 2015.
- NCSR1/INF.5: Background information related to the development of e-navigation, submitted by Norway, 28 March 2015.
- NCSR1/9: Report of the correspondence Group on e-navigation, submitted by Norway, 28 March 2015.
- MSC95/INF.19: Cyberphysical relationship in port security – CYSM project, submitted by the European Commission, 14 April 2015.
- E-Navigation Strategy Implementation Plan, approved by MSC 94, November 2014.
- FAL40/INF.4: The Guidelines on Cybersecurity on board Ships, submitted by ICS, BIMCO, INTERTANKO, CLIA and INTERCARGO, 30 December 2015.
- MSC96/4/1: The guidelines on cyber security onboard ships, submitted by BIMCO, CLIA, ICS, INTERCARGO, INTERTANKO and IUMI, 4 February 2016.
- MSC.1/Circ.1526: Interim Guidelines on Maritime Cyber Risk Management, 1 June 2016.
- MSC98/WP.9: Measures to enhance maritime security, Report of the Working Group, 15 June 2017.
- Resolution MSC.428(98): Maritime cyber risk management in safety management systems, adopted 16 June 2017.
- MSC-FAL.1/Circ.3: Guidelines on maritime cyber risk management, 5 July 2017.
- NCSR5/22/4: Industry standard on software maintenance of shipboard equipment, submitted by BIMCO and CIRM, 14 December 2017.
- MSC103/9/1: The industry guidelines on cyber security on board ships, version 4, submitted by ICS, IUMI, BIMCO, OCIMF, INTERTANKO, INTERCARGO, InterManager, WSC and SYBAss, 26 February 2021.
- MSC103/INF.8: Update on IACS' work on requirements for cyber resilient ships, submitted by IACS, 26 February 2021.
- **Marsh**: The risk of cyber-attack to the maritime sector, July 2014.
- **IUMI Conference**:
 - 2014 – presentation by Markus Wähler, Munich Re.
 - 2015 – President's workshop.
- **United States**:
 - Coast Guard:
 - www.homeport.uscg.mil (Cybersecurity left hand side of page).
 - CG-5P Policy letter: Reporting suspicious activity and breaches of security, 14 December 2016.
 - Navigation and Vessel Inspection Circular (NVIC) 05-17: Guidelines for addressing cyber risks at MTSA regulated facilities, 12 July 2017.
 - Safety Alert 06-19: Cyber incident exposes potential vulnerabilities onboard commercial vessels, 8 July 2019.
 - Symantec Web Security Threat Report 2014.
 - NIST Cybersecurity framework: <http://www.nist.gov/cyberframework/>
 - US Government Accounting Office (GAO): Report on “Maritime Critical Infrastructure protection”, <http://www.gao.gov/assets/670/663828.pdf> , June 2014.

- Department of Homeland Security, Coast Guard: Guidance on Maritime Cybersecurity Standards, Federal Register/Vol 79, No. 239 12 December 2014 & No. 243, 18 December 2014.
- **Be Cyber Aware at Sea**: <https://www.becyberawareatsea.com/>
- **CyberKeel**: <http://www.cyberkeel.com/>
- **European Union**:
 - European Network and Information Security Agency (ENISA): Analyses of cyber security aspects in the maritime sector, November 2011.
 - EU Directive 2016/1148: Concerning measures for a high common level of security of network and information systems across the Union, 6 July 2016.
 - TRANSSEC (Transport Resilience and Security Expert Group): <https://resilience.enisa.europa.eu/transport-security>
 - European Insurance and Occupational Pensions Authority (EIOPA): Cyber risk for insurers – challenges and opportunities, 2019.
 - EC DG MOVE: Transport Cybersecurity Toolkit, 16 December 2020.
- **IACS**:
 - New UR on system integration for safety critical shipboard systems (under consideration)
 - Certification of software providers under consideration.
 - Revised UR E 22 regarding on board use and application of programmable electronic systems under consideration.
 - Recommendation on Cyber Resilience (No. 166), May 2020.
- **Joint Hull Committee** in conjunction with **Stephenson Harwood**: Cyber risk paper, 2 September 2015.
- **ABS**: Guidance note on the application of cybersecurity principles to marine and offshore operations, Volume 1: Cybersecurity, February 2016.
- **UK Department for Transport & Maritime and Coastguard Agency**: Port cyber security code for operations and staff members, 16 August 2016.
- **DNV**:
 - Recommended practice 0496 – Cyber security resilience management for ships and mobile offshore units in operation, September 2016.
 - Technical & Regulatory News No. 20/2020: ISM Cyber Security is coming soon - check your preparedness, 6 October 2020.
- **International Association of Engineering Insurers (IMIA)**: Cyber Risks – Engineering Insurers Perspective, 16 September 2016.
- **Willis Towers Watson**: Client Alert – Navigating cyber risk in the transportation sector, October 2016.
- **BIMCO, CLIA, ICS, INTERCARGO, INTERTANKO, IUMI & OCIMF**: The guidelines on cyber security on board ships, 4th edition, 23 December 2020.
- **BIMCO & CIRM**: Industry Standard on Software Maintenance of Shipboard Equipment, Version 1.0, December 2017.
- **The World Association for Waterborne Transport Infrastructure, PIANC Task Group no 204**:
 - Awareness paper on cybersecurity in inland navigation, 2019.

- **Joint Rig Committee** in conjunction with **DNV GL**: Upstream Oil & Gas Cyber Risk: Insurance Technical Review, May 2018.
- **ISO 27001**: International standard for information security management systems (ISMSs).
- **Danish Maritime Authority**: Cyber and information security strategy for the maritime sector 2019-2022, January 2019.
- **FIATA**: Best practices – prevention of cybercrime, 28 March 2019.
- **ClassNK**: Cyber Security Management System for Ships, April 2019.
- **BIMCO**: Cyber Security Clause, 31 May 2019.
- **Digital Container Shipping Association (DCSA)**: Cyber security guide, March 2020.

Timeline / important dates

- IUMI conference Berlin, President's workshop: 16 September 2015 – presentations on maritime industries' draft guidelines and e-navigation followed by a panel discussion.
- MSC 98: 7-16 June 2017 – MSC Resolution: Guidelines.
- EU Member States to identify operators of essential services within air/railway/water transport by 9 November 2018. Laws and regulations to comply with EU Directive 2016/1148 to be adopted by 9 May 2018.
- NCSR 5: 19-23 February 2018.
- Conference on Transport Cybersecurity organised by ENISA, 23 January 2019 in Lisbon
- BIMCO Cyber Security Clause: May 2019.
- IACS: Three new interconnected cyber focused unique requirements, second half of 2021.

IUMI will:

- Support the industry guidelines on maritime cybersecurity practices and their implementation, and take part in future revisions.
- Support IACS' work on the cyber security recommendations, including participation in the Cyber Panel related industry working group, and argue in favour of evolving these into unified requirements.
- Encourage regulatory standardisation for cyber security.

4. Environmental, Social and Governance (ESG) issues

Brief Description:

The business of marine insurers is to provide insurance cover against “named perils” or against “all risks”. Shareholders of insurance companies and members of mutuals expect the management to run the business in a sound and viable manner. The assureds expect insurers to be financially able to cover claims, and use insurance for this purpose as a risk management tool. The role of insurance companies is not to “police” clients’ behavior. To understand and mitigate the risks, insurers will perform risk assessments based on information available to them and offer risk mitigation and loss prevention services. *“The insurance*

industry's core business is to understand, manage and carry risk" (preamble of the UNEP FI Principles for Sustainable Insurance). However, with increasing importance attached to a forward-looking and sustainable business conduct, a growing number of insurers also take environmental, social and governance (ESG) factors into consideration during their decision-making process. Investors, regulators, and society at large are beginning to focus on the issue.

Several global initiatives and agreements have led to a rise in both public and business awareness of ESG issues. These include the United Nations Sustainable Development Goals (SDGs), the Paris Agreement on Climate Change, and the work of the Marine Environmental Protection Committee (MEPC) and the Sub-Committee for Pollution Prevention and Response (PPR) of the International Maritime Organization (IMO). In April 2018, IMO adopted an initial strategy on the reduction of greenhouse gas emissions from vessels. Specifically, an agreement was reached to reduce the total annual GHG emissions by at least 50 percent by 2050 compared to 2008. In December 2019, shipowners' organisations submitted a proposal to establish an IMO GHG reduction research and development programme to accelerate this target. MEPC approved in November 2020 a measure demanding energy efficiency requirements on existing ships starting from 2023, and the introduction of carbon intensity targets for vessels that will become mandatory in 2026. A comprehensive assessment of the impact will be presented ahead of the expected adoption in June 2021.

The European Union is discussing an even more ambitious legislation. On 7 July 2020, the Environment Committee voted to include CO² emissions from the maritime sector in the EU Emissions Trading Systems. Part of the revenues are proposed to be used for an Ocean Fund to support innovative green technologies and protect the marine ecosystems. Binding requirements to reduce the annual average CO² emissions per transport work for all vessels by at least 40% by 2030 were also introduced. The proposals were adopted by the Plenary in September 2020, and a proposal for a revised Emissions Trading System with the inclusion of shipping is expected in June 2021.

The growing pressure and urgency across all sectors of society to respond and find solutions to ESG issues has led to some rethinking within the marine insurance industry. Individual companies are reconsidering their targets and responsibilities beyond their core businesses to incorporate sustainability. These insurance companies work on a better understanding and overarching principles to identify and define ESG standards that align with their values and commitments as a company. This framework will also guide what information they will seek from clients and other third parties. Considerations may comprise aspects of underwriting, claims handling, loss prevention, investment strategies, recruitment and education. Acknowledging the importance of ESG issues for the industry, some insurance companies have already integrated ESG issues and principles into their corporate strategy and established reporting procedures to ensure compliance with the company's defined ESG standards.

In 2012, the United Nations Environmental Programme Financial Initiative (UNEP FI) launched the UNEP FI Principles for Sustainable Insurance. UNEP intend the four principles to serve as a global framework for the insurance industry to address ESG risks and opportunities. Their core content is

1. Embed environmental, social and governance issues relevant to our insurance business in the decision-making.

2. Work together with clients and business partners to raise awareness of environmental, social and governance issues, manage risk and develop solutions.
3. Work together with governments, regulators and other key stakeholders to promote widespread action across society on environmental, social and governance issues.
4. Demonstrate accountability and transparency in regularly disclosing publicly our progress in implementing the Principles.

The Principles have led to one of the largest collaborative initiatives between the UN and the insurance industry—the PSI Initiative. Over 140 organisations worldwide have adopted the four Principles for Sustainable Insurance, including some insurers representing more than 25% of world premium volume. The purpose of the PSI Initiative is to better understand, prevent and reduce environmental, social and governance risks, and better manage opportunities to provide quality and reliable risk protection. In February 2020, IUMI became a supporting institution to the UNEP FI PSI.

In 2017, the UN agreed to start negotiations for a legally binding agreement developed as a part of the United Nations Convention on the law of the seas (UNCLOS); the Biodiversity Beyond National Jurisdiction (BBNJ) Agreement. The negotiations were scheduled to conclude in 2020, but due to delays in light of COVID-19 more time is needed.

In 2019, the UNEP FI launched the first guideline for “Underwriting environmental, social and governance risks in non-life insurance business” The guide is not intended as a formal standard which organizations are required to comply with or follow directly; the guide is an optional support tool to help organizations grasp this wide-ranging topic, particularly those without any or fairly limited ESG expertise. The guideline was subject to a public consultation in 2019, and the full 1.0 version of the guide was published in June 2020. The aim is to update the guide on a yearly basis.

In February 2020, IUMI co-sponsored a paper to the IMO with a proposal to develop a guidance to address bribery and corruption in the maritime sector. A key objective in this work should be to align actions in the maritime sector with the UN Convention against Corruption (UNCAC). The Facilitation Committee (FAL 44) established in October 2020 a Correspondence Group on “Guidance to Address Maritime Corruption” under the coordination of the Marshall Islands. The group’s primary aim is to develop draft guidance to implement anti-bribery and anti-corruption practices.

A number of IUMI’s current policy topics relate directly to ESG, e.g. polar sailings and the IMO 2020 low sulphur regulation. Other policy issues with an ESG angle are currently under consideration either by IUMI or by IUMI’s membership.

Conflict minerals

Supply chain due diligence requirements regarding so-called conflict minerals aimed at greater transparency, are applicable or introduced by (supra) national law makers.

EU Regulation 2017/821, which came into force on 1 January 2021, puts in place a framework for EU-based importers of certain metals and minerals origination from conflict-affected and high-risk areas (CAHRAs). The purpose is to ensure that trade into the EU is not funding conflicts and human rights abuses.

Importers, traders, smelters and refiners of

- concentrates and ores containing 3TG (tin, tantalum, tungsten and gold), and
- metals containing or consisting of 3TG

have to carry out obligatory due diligence checks on suppliers and origin of the materials.

The importers, including those who are not established in the EU, must declare minerals and/or metals for release and circulation in the EU. Smelters and refiners who exercise any form of extraction and/or metallurgy processing aiming at producing a metal from a mineral, are under the same due diligence obligation. Downstream users who do not directly import any of these materials are exempted from this obligation.

The supply chain due diligence obligations can be summarized as follows:

- adopt a supply chain policy for 3TG and communicate this to suppliers and the public; this includes risk assessment, a strategy to respond to identified risks, third party independent audits in the supply chain,
- implement due diligence standards as per OECD guidance³;
- senior management to establish strong company management systems to control, hold records of the process and report,
- incorporate appropriate contractual provisions in the supply chain,
- provide for an information and disclosure to authorities, and
- establish a complaint procedure for stakeholders including access to an external expert.

Similar but not identical provisions are part of the US 'Dodd-Frank' Act section 1502 aiming at the Democratic Republic of Congo (DRC) and neighbouring countries.

Based on the many initiatives and expectations concerning ESG and how this is handled also by marine insurers, IUMI will naturally play a role by facilitating a dialogue within the IUMI membership, and addressing IUMI members' position on ESG issues towards public stakeholders, authorities and industry partners. Examples where ESG issues affect marine insurance business are manifold: Environmental issues may be affected for example when it comes to climate change, air / sea pollution or unsustainable practices (e.g. in polar water or by illegal fishing practices). Governance issues play a role in marine insurers' work on compliant and sustainable business.

IUMI cannot and will not bind its members with overarching commitments, but will enable its members to decide on their own action and commitments in a transparent manner and on a fully educated basis.

Relevant authority / organizations and documents:

- **Cape Town Agreement** of 2012 on the Implementation of the Provisions of the 1993 Protocol relating to the Torremolinos International Convention for the Safety of Fishing Vessels, 1977, 11 October 2012.
- **International Maritime Organization (IMO)**, MEPC and PPR:
(www.imo.org/en/OurWork/Environment/Pages/Default.aspx#have)
 - LC 41/9: Update on recent development with respect to marine litter and microplastics, note by Secretariat, 5 July 2019.
 - JWG 4/9: Cooperation and dialogue on environmental issues relating to fisheries, note by Secretariat, 24 September 2019.

³ <https://www.oecd.org/corporate/mne/mining.htm>

- [MEPC75/7/4](#): Proposal to establish an International Maritime Research and Development Board, submitted by BIMCO, CLIA, ICS, INTERCARGO, INTERFERRY, INTERTANKO, IPTA and WSC, 18 December 2019.
- [MEPC75/INF.5](#): Preliminary analysis of what R&D work activities could be undertaken by IMRB, submitted by ICS, BIMCO, INTERTANKO, CLIA, INTERCARGO, IPTA, INTERFERRY and WSC, 18 December 2019.
- [MEPC75/8](#): Update on recent interagency cooperation and capacity-building activities on marine plastic litter, submitted by the Secretariat, 18 December 2019.
- [MEPC75/8/3](#): Report of the Correspondence Group on development of a strategy to address marine plastic litter from ships, 27 December 2019.
- [FAL44/13](#): IMO guidance to address bribery and corruption in the maritime sector, submitted by Liberia, Marshall Islands, Norway, United States, Vanuatu, ICS, IUMI, IAPH, BIMCO, IMPA, IFSMA, INTERTANKO, IG, InterManager, IPTA, IHMA, IBIA, FONASBA, ITF and NI, 7 February 2020.
- [MEPC75/WP.3](#): Final report of the seventh meeting of the Intersessional Working Group on Reduction of GHG Emissions from Ships, 10 November 2020.
- **United Nations**
 - [Environmental Programme Financial Initiative \(UNEP FI\)](#): www.unepfi.org
 - Principles for Sustainable Insurance: www.unepfi.org/psi/the-principles, 2012
 - Guidelines to control or mitigate the risk of insuring vessels and companies associated with illegal, unreported and unregulated (IUU) fishing), 2018.
 - [PSI ESG Guide for non-life insurance, Version 1.0, June 2020](#).
 - [Final report on the project to pilot the TCFD recommendations, January 2021](#).
 - [Sustainable Development Goals \(SDG\)](#): www.un.org/sustainabledevelopment
 - [Paris Agreement on Climate Change](#): (www.unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement)
- **European Union**:
 - [Conflict minerals regulation](#): <https://ec.europa.eu/trade/policy/in-focus/conflict-minerals-regulation/regulation-explained/>, 22 November 2016.
 - [2020/C 349/01](#): Guidelines on the enforcement of obligations under the EU Ship Recycling Regulation relating to the Inventory of Hazardous Materials of vessels operating in European waters, 20 October 2020.
- **United States**:
 - [Dodd-Frank Act Section 1502](#)
- **Neptune Declaration**: Declaration on seafarer wellbeing signed by IUMI in January 2021.
- **IACS**: Position paper – Developing and implementing technical measures to support GHG emission reduction targets, 8 March 2021.

Timeline / important dates:

- IUMI response to UNEP FI consultation on the guideline for underwriting environmental, social and governance risks in non-life insurance business, 30 September 2019.
- Presentation Hermelo Bacani, UNEP FI, during IUMI Toronto Conference, 17 September 2019
- Ministerial Conference on Fishing Vessel Safety and Illegal, Unreported and Unregulated (IUU) Fishing in Torremolinos, Spain, 21-23 October 2019.
- IUMI membership survey on ESG risks and principles, late 2019 / early 2020.

- PPR 7: 17 - 21 February 2020.
- IUMI becomes a UNEP FI PSI 'Supporting Institution', February 2020.
- BBNJ agreement negotiations due for completion in 2021.
- EU Plenary 14-17 September 2020.
- FAL 44: 28 Sept-2 Oct 2020.
- IUMI webinar UNEP ESG PSI guide, 6 October 2020.
- IMO Intersessional WG on GHG emissions: 19-23 October 2020.
- MEPC 75: 16-20 November 2020.
- EU conflict minerals regulation enters into force 1 January 2021.
- MEPC 76: 14-25 June 2021.

IUMI will:

- Inform IUMI's membership where appropriate about developments with regard to ESG issues and facilitate where necessary an internal dialogue in order to agree on IUMI positions.
- Explain and communicate IUMI's standpoints to other industry participants and public stakeholders / authorities.
- Participate in the industry and public dialogue on "ESG risks and principles" and make IUMI's position heard and understood.
- Support the Cape Town Agreement on the implementation of the Torremolinos Convention for the safety of fishing vessels.

5. EU Offshore Safety Directive

Brief description

The European Commission (EC) proposed in October 2011 a Regulation on the safety of offshore oil and gas prospection, exploration and production activities aiming amongst others to extend the scope of the Environmental Liability Directive (ELD) to include "all waters under the jurisdiction of the Member States" and mandating financial security. A study was commissioned on *liability security schemes for offshore environmental risks*, drafted by the University of Maastricht.

Joint industry efforts were made to prevent some of the more controversial suggestions of the Regulation and explain the practical implications – and impracticability – of extending the ELD due to:

- most likely an inability to quantify the damages in a longer term, and
- scale of potential loss and selectivity by insurers.

In October 2012, the Industry, Research and Energy Committee (ITRE) of the European Parliament voted in favour of transforming the proposal from a Regulation to a Directive. The Directive was formally adopted in June 2013.

Article 4 of the new Directive states that evidence of provisions to cover potential liabilities shall be included in the application for a licence.

With reference to financial security, the Directive states that:

“(63) Operators should ensure they have access to sufficient physical, human and financial resources to prevent major accidents and limit the consequences of such accidents. However, as no existing financial security instruments, including risk pooling arrangements, can accommodate all possible consequences of major accidents, the Commission should undertake further analysis and studies of the appropriate measures to ensure an adequately robust liability regime for damages relating to offshore oil and gas operations, requirements on financial capacity including availability of appropriated financial security instruments or other arrangements. This may include an examination of the feasibility of a mutual compensation scheme. The Commission should submit a report to the European Parliament and to the Council on its findings, accompanied if appropriate, by proposals.”

Following up on this request, two studies on civil liability, financial resources and compensation claims for offshore oil and gas activities were presented in October 2014 and August 2014. IUMI was consulted as part of the studies, explaining the practical implications, limitations and how the market functions from an offshore energy insurance perspective.

A report on the Commission’s assessment of the effectiveness of the liability regimes in the EU in respect of the damage caused by offshore oil and gas operations was released in September 2015. The report concludes that a broadening of liability provisions through EU legislation does not appear appropriate at this juncture. In case new national laws fail to improve the availability of financial security instruments and put in place procedures for ensuring prompt and adequate handling of compensation claims, the Commission informs that it will reassess whether and what further EU action could achieve these objectives.

In March 2016, the EP Committee on the Environment, Public Health and Food Safety (ENVI) issued a draft opinion, recommending that the (responsible) Committee on Legal Affairs calls on the Commission to consider the establishment of a legislative compensation mechanism for offshore accidents with minimum requirements. Responding to these discussions, IUMI presented in April 2016 a position paper to members of the relevant parliamentary committees. The report of the Committee on Legal Affairs was presented in October with only some minor modifications to the ENVI opinion. The report recognised that *“over-reliance on insurance could potentially result in a closed market for financial security instruments, with the corollary potential for a lack of competition and increased cost”*. The possibility of finding an international solution was also encouraged. IUMI remains unpersuaded that a legislative compensation system over and above the existing provisions is needed and continues to believe that a voluntary financial security system is likely to be most effective.

In September 2018, the Commission launched a public consultation to gather views on the implementation of the Directive. IUMI responded to the consultation in December 2018. An assessment of the implementation of the Directive was presented in a report to the European Parliament in November 2020. Concerning liability and the handling of compensation claims, the EC intends to follow-up with further analysis and/or research. The intention will be to assess whether a uniform regime on, for example, the principle of strict liability of installation operators and owners that go beyond the minimum requirements of the Directive would benefit the safety of offshore operations and the follow-up of accidents.

Relevant authority / organisations and documents

- **European Commission**
 - Proposed EC Regulation 27 October 2011.
 - University of Maastricht – Civil liability, financial security and compensation claims for offshore oil and gas activities, 22 October 2013.
 - BioIS study – Civil liability, financial security and compensation claims for offshore oil and gas activities in the EEA, 14 August 2014.
 - COM(2015) 422 final – Report from the EC to the EP and Council on liability, compensation and financial security for offshore oil and gas operations pursuant to Article 39 of Directive 2013/30/EU, 14 September 2015.
 - Consultation: Evaluation of the Directive on safety of offshore oil and gas operations, 19 September 2018. IUMI response 19 December 2018.
 - Annual Reports on the Safety of Offshore Oil and Gas operations in the European Union: https://ec.europa.eu/energy/topics/energy-security/offshore-oil-and-gas-safety/offshore-oil-and-gas-operations-directive_en#evaluation-of-the-safety-of-offshore-oil-and-gas-directive.
 - COM(2020) 732 – Report from the EC to the EP, the Council and the European Economic and Social Committee: Assessing the implementation of Directive 2013/30/EU of the European Parliament and the Council of 12 June 2013 of the safety of offshore oil and gas operations and amending Directive 2004/35/EC & SWD(2020) 260 Commission Staff Working Document, 16 November 2020.
- **European Parliament** – Environment, Public Health and Food Safety Committee (ENVI) & Industry, Research and Energy Committee (ITRE).
 - Directive 2013/30/EU of the European Parliament and of the Council of 12 June 2013 on safety of offshore oil and gas operations and amending Directive 2004/35/EC.
 - ENVI Committee: Draft Opinion, 22 March 2016, final version 12 July 2016.
 - Committee on Legal Affairs: Plenary report, 19 October 2016.
- **Position papers – industry:**
 - Insurance Europe: 2012.
 - Norwegian maritime/oil & gas industries: 30 January 2012.
 - UK maritime industry: 18 April 2012.
 - **ECSA:**
 - 2 October 2014.
 - April 2016.
 - 8 May 2017, together with EADC and IMCA.
 - **IUMI:**
 - 24 September 2012.
 - **14 April 2016 – EU Directive:** <https://iumi.com/opinions/position-papers>.

Timeline / important dates

- Directive 2013/30/EU applies through national laws/regulations from 19 July 2016 for new installations, and no later than 19 July 2018 for existing ones.

- European Parliament resolution 2015/2353(INI), adopted 1 December 2016.

IUMI will:

- Support a voluntary financial security system rather than a legislative compensation system over and above existing provisions.
- Explain the capabilities and limitations of insurance as a financial security instrument, and require a cost-benefit analysis cross-referred with insurance market capabilities if further investigations are to take place.

6. EU Recognised Organisations and Mutual Recognition

Brief description

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 coordinates its 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. The first tier of products was adopted for implementation in 2012. The most recent MR Technical Requirements were published on 1 January 2019 (Tier 7).

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 the insurance 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 really know what quality of vessels they have or what quality of components 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 the 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 has worked on an alternative Product Evaluation Process (PEP) model as well as a PEP Instruction Manual and PEP Guiding Questions, and presented this for review and comments in the summer of 2019 (deadline 31 August 2019).

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.
- **European Commission:**
 - COM(2015) 382: Report to the European Parliament and the Council pursuant to Article 10.2 of Regulation (EC) N° 391/2009 on common rules and standards for ship inspection and survey organisations, 31 July 2015.
 - COM(2016) 47: Report to the European Parliament and the Council on the progress in the implementation of Regulation (EC) No 391/2009 and Directive 2009/15/EC on common rules and standards for ship inspection and survey organisations and for the relevant activities of maritime administrations, 5 February 2016.
 - Public consultation on the fitness of EU legislation for maritime transport safety and efficiency, 7 October 2016.
- **EU ROs**
 - First report to the EC and Member States – October 2012.
 - Joint report from EU-ROs and SEA Europe workshop, London, 28 May 2014.
 - www.euromr.org
- **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 29.05.2015.
 - Workshop report October 2015.

Timeline / important dates

- Workshop on EC Reg. 391/2009 Article 10.1, London, 28 May 2014.
- RO Code in force from 1 January 2015.
- IUMI Conference Berlin, Legal & Liability workshop 15 September 2015: Prof. Dr. Henning Jensen, University of Hamburg & Robert Clyne, ABS.
- MR Workshop, University of Strathclyde, Glasgow, 25 September 2015.
- EC report to Parliament (EP TRAN) on 21 December 2015.
- EC consultation on fitness of EU legislation for maritime transport safety and efficiency 7 October 2016 – 8 January 2017.
- Tier 6 MR Technical Requirements: Released 1 January 2018, coming into effect on 1 July 2018.

- SEA Class WG meeting, Copenhagen, 13 June 2018.
- EU RO MR workshop, Hamburg, 5 September 2018.
- Meeting with EC DG MOVE, Brussels, 8 March 2019.
- Consultation deadline EU RO MR Group's alternative Product Evaluation Process (PEP) model, PEP Instruction Manual and Guiding Questions: 31 August 2019.

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.

7. Fuels

Brief description

Machinery damage is by far the most frequent cause of loss in marine insurance, and the numbers are likely to increase with the introduction of low-sulphur limits. Historically, 40% of all hull claims by number are machinery damage making up 30% of the costs.

Low-sulphur fuels

The MARPOL regulation limiting sulphur oxide emissions from ships with a global cap of 0.5% became mandatory on 1 January 2020.

Prior to this date, concerns had been raised in relation to fuel stability, differences in composition and blending from supplier to supplier and port to port, lower flashpoints than the minimum required by international safety regulations, inadequate safety margins for catalytic fines and ignition delays stemming from inferior combustibility. The Maritime Safety Committee agreed in December 2018 to include in its biennial agenda an output on "Development of further measures to enhance the safety of ships relating to the use of fuel oil". With a strong focus on safety issues related to flashpoint requirements, MSC 101 endorsed in June 2019 an action plan for the development of these measures in view of finalizing at MSC 104 in 2021.

Guidance is offered by amongst others ISO, classification societies, the International Council on Combustion Engines (CIMAC) and industry associations. In August 2019, a Joint Industry Group published a Guidance on the supply and use of 0.50%-sulphur marine fuel. The guidance is supported by IUMI as one of the project sponsors. The publication provides guidance for stakeholders across the marine fuels and shipping industries, from fuel blenders and suppliers to end users. It presents the specific safety and operational issues relating to the supply and use of max. 0.50%-sulphur fuels, an overview of fuel quality principles, and the controls that should be put in place to ensure that safety issues are identified, prevented and/or mitigated. It addresses issues such as fuel compatibility, fuel stability, and fuel handling and storage, and contains a comprehensive review of existing operational factors that can affect safety.

To get a better understanding of the quality of the new fuels and possible safety implications following the implementation of the IMO 2020 sulphur regulation, BIMCO, ICS, INTERCARGO and INTERTANKO conducted a survey on fuel quality and safety among shore-based personnel in the period February – May 2020. Of the respondents, 14% had not experienced any off-spec or operational quality issues, while 62% had to some extent experienced increased sludge deposits. The report concludes that the transition to the 0.5% sulphur limit has not been without problems, and as fuel oil properties are fluctuating, quality and safety problems will continue to be a challenge for the global shipping industry.

Cat fines

The most typical and well-known contaminant that can destroy an engine in a short time is cat fines. Cat fines are an inevitable by-product of refining and consist of small particles of metal that are deliberately introduced to 'crack' the fuel. Unless removed by purification, cat fines will become embedded in engine parts and cause serious and rapid engine damage. Filtration of fuel has been a requirement on board for many years, but crews are now noticeably less experienced and less reliable in operating the systems. Cat fines due to inadequate tank cleaning and sediments in tank bottoms is also a more common issue since the introduction of IMO 2020.

Vessel operators and crew often have no idea about the purity of the fuel they use, nor is there any obligation to find out before using it. Often, the purifiers installed are inefficient and cannot cope. Cases are known where filters have been removed. A discrepancy exists between ISO standards for cat fine content⁴ and the content recommended and anticipated by engine manufacturers in engine design. Engines need fuel with a concentration of cat fines at no more than 15ppm, but fuel is produced and sold at 60ppm and more. Effective filtration, purification and fuel management is required. There is clearly a need for more crew training and somebody to verify that the equipment and systems installed actually remove the cat fines on their way to the engine.

According to the fuel testing agency DNV Petroleum Services, the bunker fuel industry in the U.S. has seen a rise in metals content as a result of regulations to reduce the level of sulphur in bunker fuel. Low sulphur fuels are less lubricating, and this combined with the introduction of increased amounts of abrasive materials, causes damage. Once cat fines become embedded in engine parts, they cannot be removed. Until fairly recently, such losses have simply been described as engine damage or crew negligence and the real cause not identified. It is only now that definite attributable losses are being reported.

Claims due to cat fines have been identified in the range of USD 300,000 to USD 1.5 million, mostly in low speed engines. Wear is very rapid; for example, if liners are replaced, they could be worn out again in three days. In a technical paper presented at the CIMAC Congress in 2013, cat fines were found in 84% of all the cylinder liner high wear cases investigated. In a more recent study⁵ that was published after the new IMO 2020 sulphur regulation took effect, 31% of the respondents answered they had experienced operational issues caused by increased wear and tear of cylinder liners, piston rings or other components due to increased amounts of cat fines in the fuel oil.

⁴ HFO with a cat fines content of up to 60ppm is compliant with the ISO 8217:2010 fuel standard

⁵ BIMCO, ICS, INTERCARGO, INTERTANKO: 2020 Fuel Oil Quality and Safety Survey, 19 August 2020

Contributory changes which would help:

- Sampling and testing of fuel before use
- Improved fuel handling on board
- Improve the quality of bunkers
- Alter the ISO standard
- Charter/bunkering contracts should specify fuel less than 60ppm
- Regular cleaning of filters, frequent drainage
- Clean the settling and service tanks during dry dock
- Check centrifuge capacity on specifications for new buildings
- Ensuring optimized fuel system treatment
- Introducing a new fuel cleaning system layout
- Automatic control of the cleaning flow rate
- Intensified monitoring of the fuel treatment efficiency

IUMI raised the need of more class involvement to ensure that vessels can safely operate on the new fuels required in the future with IACS in January 2011, and attended a meeting with the Machinery Panel in September 2013 to present the insurance industry's concerns. Following this meeting, the IACS Machinery Panel decided to review the members' current requirements on facilities provided for handling the fuel on board to establish a common baseline. The IACS Recommendation for petroleum fuel treatment systems for marine diesel engines was subsequently published in July 2017.

Fuel contamination

Contaminated supplies of biodiesel fuel that were first reported in the US Gulf region in February 2018 have since persisted on an unprecedented scale and may have affected as many as 1,000 vessels.

This contamination has led to a range of technical problems, including blocked fuel filters, fuel pump seizures and even loss of main engine power. The cost of an engine damage could be up to USD 800,000 for an individual vessel. The loss of engine power may lead to serious incidents such as collisions and groundings.

Testing to ISO8217 levels will not necessarily show if the fuel is contaminated or not, as the suitability of biofuels requires gas chromatography and specialised equipment in a laboratory to determine any contamination. This test will generally take 7 to 10 days, and there are today not enough laboratories to perform the necessary testing. Consequently, vessels are forced to sail with fuel in separate tanks and rely on the ability of the crew and equipment to make the fuel fit for use.

IUMI believes that the current system with the end-user taking all the risk is unacceptable. Rather than the end user, refineries should be compelled to do the testing and confirm the delivery of non-contaminated fuels. In parallel, the ISO review of low-sulphur fuels should also include an amendment of the ISO8217 to deal with biofuels.

A joint MEPC-MSC circular addressing the delivery of compliant fuel oil by suppliers was approved by MEPC 74 and MSC 101 in May and June 2019, respectively. The Circular recommends that Member States take appropriate action to ensure that fuel oil suppliers under their jurisdiction deliver compliant fuel.

In December 2018, BIMCO published a Marine Fuel Sulphur Content Clause for Time Charter Parties. The Clause states that charterers are obliged to provide fuel that complies with MARPOL requirements, and also use suppliers and bunker barge operators who comply with the same. Shipowners remain responsible for the fuel management.

Relevant authority / organisations and documents

- **IMO – MEPC & MSC**

- MARPOL Regulation 14 & Annex VI: “Prevention of Air Pollution from Ships, allowing for special (SOx) Emission Control Areas”.
- MSC93/INF.8: Safety implications arising from the supply of “Out of Specification” Marine Fuels, submitted by ICS and IPTA, 13 March 2014.
- MEPC70/INF.12: Study on fuel oil quality, submitted by INTERTANKO, 22 July 2016.
- PPR4/20/3: Justification and scope for a new output on effective implementation of the 0.50% m/m global sulphur limit, submitted by BIMCO, CLIA, ICS, INTERCARGO, INTERTANKO, IPTA and WSC, 25 November 2016.
- MEPC71/5/3: Report of the correspondence Group on Fuel oil quality, submitted by the United States, 31 March 2017.
- ISWG-AP1/2/12: Safety implications associated with 2020 fuels and their respective challenges, submitted by Liberia, Marshall Islands, ICS, BIMCO, INTERTANKO, INTERCARGO and WSC, 15 May 2018.
- MEPC 73/5/17: Joint industry guidance on potential safety and operational issues related to the supply and use of 0.50% maximum sulphur fuels, submitted by ISO, OCIMF, IPIECA, IMarEST, RINA and IBIA, 31 August 2018.
- MSC100/8/1: Effective implementation of existing provisions for fuel quality and safety in IMO conventions, submitted by Liberia, ICS, INTERTANKO, IPTA and INTERFERRY, 28 September 2018.
- MSC100/8/2: Safety implications and respective challenges associated with 2020 compliant fuels, submitted by Bahamas, Liberia, Marshall Islands, Panama, BIMCO, INTERCARGO and INTERTANKO, 28 September 2018.
- MEPC.1/Circ.875: Guidance on best practice for fuel oil purchasers/users for assuring the quality of fuel oil used on board ships, 26 April 2018.
- MEPC.1/Circ.875/Add.1: Guidance on best practice for fuel oil suppliers assuring the quality of fuel oil delivered to ships, 9 November 2018.
- MEPC.1/Circ.878: Guidance on the development of a ship implementation plan for the consistent implementation of the 0.50% sulphur limit under MARPOL Annex VI, 9 November 2018.
- MEPC.1/Circ.880: Reporting of availability of compliant fuel oils in accordance with regulation 18.1 of MARPOL Annex VI, 9 November 2018.

- MSC100/WP.11: Report of the Drafting Group on Fuel Oil Safety Matters, 5 December 2018.
- MSC101/8: Method of work for evaluating the need for further measures to enhance the safety of ships relating to the use of fuel oil, submitted by IACS, 29 March 2019.
- MSC101/8/2: Development of further measures to enhance the safety of ships relating to the use of fuel oil, submitted by ICS, INTERTANKO, INTERCARGO and IPTA, 16 April 2019.
- Resolution MEPC.320(74): 2019 Guidelines for consistent implementation of the 0.50% sulphur limit under MARPOL Annex VI.
- MEPC.1/Circ. 881: Guidance for port state control on contingency measures for addressing non-compliant fuel oil, 21 May 2019.
- MEPC.1/Circ. 884: Guidance for best practice for member state/coastal state, 21 May 2019.
- MEPC.1/Circ.864/Rev.1: 2019 Guidelines for on board sampling for the verification of the sulphur content of the fuel oil used on board ships, 21 May 2019.
- CCC6/INF.6: FSA study on the use of low-flashpoint oil fuels, submitted by the EC and Member States, 10 June 2019.
- MSC101/WP.10: Development of further measures to enhance the safety of ships relating to the use of fuel oil, Report of the Working Group, 11 June 2019.
- MSC-MEPC.5/Circ.15: Delivery of compliant fuel oil by suppliers, 24 June 2019.
- MEPC75/5/2: Bunker Supplier Licensing Schemes, submitted by ICS, BIMCO, INTERTANKO and WSC, 27 December 2019.
- MSC102/6: Development of further measures to enhance the safety of ships relating to the use of fuel oil, report of the Correspondence Group, 18 February 2020.
- MSC102/INF.19: Lessons learned from the mechanical incident caused by non-compliant fuel oil that contains deleterious chemicals, submitted by China, 10 March 2020.
- MSC102/6/2: Comments on document 102/6, submitted by the Cook Islands and ICS, 24 March 2020.
- MEPC76/5: Review of 2020 marine fuels quality, submitted by ISO, 29 January 2021.
- **EU**
 - Sulphur Directive 1999/32/EC with amendments.
- **CIMAC**
 - Congress 2013, Paper no. 51: “Onboard fuel oil cleaning, the ever-neglected process How to restrain cat-fine damages in two-stroke marine engines”. Paper presented by experts from MAN Diesel and Turbo (Denmark), DNV Petroleum Services (Singapore), NanoNord (Denmark), Alfa Laval Tumba (Sweden).
 - Position Paper 6/2015: New 0.1% sulphur marine (ECA) fuels, June 2015.
 - WG7 Fuels: Guideline - Cold flow properties of marine fuel oils, January 2015.
 - WG7 Fuels: Fuel quality Guide - Ignition and combustion, 2011.
 - WG7 Fuels: 2018 marine fuel incidents, November 2018.

- WG7 Fuels: Guideline – Marine fuel handling in connection to stability and compatibility, November 2019.
- Position Paper 01/2020: Zero carbon energy sources for shipping (ISWG-GHG7/5/1, submitted by EUROMOT, 5 February 2020)
 - White Paper 1: Production pathways for hydrogen with a zero carbon footprint
 - White paper 2: Zero and net zero carbon fuel options
- **UK P&I Club** Risk Focus: Loss of power
- **Joint Hull Committee** information pack: Marine engine damage due to catalytic fines in fuel, joint paper with Braemar (The Salvage Association), 26 September 2013
- **U.S.**
 - Environmental Protection Agency (EPA): North American Emission Control Area: <http://www.epa.gov/otaq/oceanvessels.htm#north-american>
 - Coast Guard: Safety Alert 10-18: U.S. Gulf Coast bunker contamination, 8 June 2018.
- **Wärtsila** Fuel Oil Requirements (Heavy Fuel Oil).
- **MAN**: Service Letter SL2014-593/DOJA, December 2014.
- **Gard** Loss Prevention Circular No. 01-14: Prevention of engine damage due to catalytic fines, February 2014.
- **IACS Machinery Panel: No. 151 Recommendation for petroleum fuel treatment systems for marine diesel engines, July 2017.**
- **ISO**:
 - 8217:2017 – Specifications of marine fuels, 21 March 2017.
 - ISO/PAS 23263:2019: Petroleum products – Fuels (class F) – Considerations for fuel suppliers and users regarding marine fuel quality in view of the implementation of maximum 0.5% sulfur in 2020, September 2019.
- **U.S. Coast Guard**:
 - Safety Alert 13-15: Ultra Low Sulphur Fuel Oil & Compliance with MARPOL Requirements, 19 November 2015.
- **IUMI: Position Paper on Catalytic Fines and Engine Damage, 8 March 2016** (<https://iumi.com/opinions/position-papers>).
- **INTERTANKO** Critical review: Contaminated Bunkers damage hundreds of ships. Do authorities really care?, 10 August 2018.
- **International Chamber of Shipping**: Provisional guidance to shipping companies and crews on preparing for Compliance with the 2020 ‘Global Sulphur Cap’, September 2018.
- **BIMCO**:
 - 2020 Marine sulphur content clause for time charter parties, 10 December 2018.
 - 2020 Fuel transition clause for time charter parties, 10 December 2018.
- **Joint Industry Guidance: The supply and use of 0.50%-sulphur marine fuel, 20 August 2019.**
- **Exhaust Gas Cleaning Systems Association (EGCSA)**: Global marine SOx emissions regulation map: <https://www.egcsa.com/map-regulations/>
- **BIMCO, ICS, INTERCARGO and INTERTANKO**: 2020 Fuel Oil Quality and Safety Survey, 19 August 2020.

Timeline / important dates

- **Sulphur limits:**
 - Californian waters: 0.1% sulphur limit as of 1 August 2012.
 - North American Emission Control Area (ECA): 1.0% sulphur limit as of 1 August 2012.
 - European and North American ECAs: 0.1% sulphur limit as of 1 January 2015.
 - MARPOL – outside ECAs: 0.5% sulphur limit as of 1 January 2020.
 - China:
 - Coastal territorial waters, except coastline Hong Kong, Macao and Taiwan: 0.5% sulphur limit as of 1 January 2019.
 - Inland water ECAs: 0.1% sulphur limit as of 1 January 2020.
 - Regulated waters of Hainan Island: 0.1% sulphur limit as of 1 January 2022.
 - South Korean ECA:
 - Certain ports introduces 0.1% sulphur limit from 1 September 2020.
 - 0.1% sulphur limit when navigation in the ECA area from 1 January 2022.
- IACS letter to IUMI 23 July 2012. IUMI response 19 November 2012.
- Loss Prevention workshop, IUMI conference London, 15-18 September 2013.
- Meeting with IACS Machinery Panel, 3 September 2013.
- IACS Unified Requirement: 2Q 2016.
- MEPC 74: 13 - 17 May 2019.
- Joint industry project of ship owners, bunker suppliers and other interested parties (BIMCO, ICS, OCIMF, IPIECA, Intertanko, Intercargo and others, IUMI is observer) aim to publish a guidance in July/August 2019. Progress was reported to PPR in February 2019.
- MEPC 75: 16-20 November 2020; adoption of guidelines and treatment of MARPOL samples.
- New ISO 8217 standard expected to be published in 2023.

IUMI will:

- Encourage implementation of the new IACS recommendation for petroleum fuel treatment systems for marine diesel engines by all IACS members.
- Increase awareness by presenting available documentation of losses due to cat fines, and warn of the risks involved.
- Monitor developments related to switch-over from heavy fuel to distillates in the ECAs.
- Encourage an amendment of the 60mg/kg limit for cat fines and the inclusion of biofuels in the ISO standard.
- Support a review by MSC of the safety aspects of implementing the 0.5% sulphur limit with effect from 2020.
- Suggest that refineries are compelled to test and confirm the delivery of non-contaminated fuels.

8. Low pressure fuel systems

Brief description

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 have formed a correspondence group (CG) comprised of technical experts from the membership of both associations. Identification of hot spots, use of thermography, and proper installation of insulation are among the preventive measures identified for further discussion. The CG held its inaugural meeting in March 2020.

Relevant authority / organisations and documents

- **IMO – MSC:**
 - MSC/Circ.601: Fire protection in machinery spaces, 29 January 1993.
 - Resolution MSC.31: SOLAS amendments, 23 May 1994.
 - MSC/Circ.647: Guidelines to minimize leakages from flammable liquid systems, 6 June 1994.
 - MSC/Circ.851: Guidelines on engine-room oil fuel systems, 1 June 1998.
 - MSC.1/Circ..1321: Guidelines for measures to prevent fires in engine-rooms and cargo pump-rooms, 11 June 2009.
- **IACS:**
 - Rec.No.18/Rev. 2: Fire prevention in machinery spaces of ships in service – Guidance to owners, February 2021.
 - Rec.No.58/Rev. 2: Fire protection of machinery spaces, February 2021.
 - UR35/Rev.8: Fire protection of machinery spaces, June 2005.
- **Cefor: Technical Forum Memo 6: Fire risks due to leakage from low pressure fuel pipes, 22 May 2017.**

Timeline / important dates

- Inaugural meeting of IACS-IUMI technical correspondence group, 13 March 2020.

IUMI will:

- Take part in discussions on how to prevent and mitigate fire risks due to leakage from low pressure fuel systems.

9. Places of Refuge

Brief description

Current practice concerning places of refuge is a concern to insurers.

The incident with fire-stricken container vessel “*MSC Flaminia*”, which in 2012 was left adrift for weeks until finally granted a port of refuge in Germany, prompted a new European Commission (EC) Cooperation Group on Places of Refuge. The Group was charged with assessing the need to improve existing legislation and why EU Member States took so long to provide safe refuge.

After an explosion and fire aboard the “*M/T Stolt Valor*” at a distance of 40 nm from Kingdom of Saudi Arabia in March 2012, a place of refuge was denied by the coastal States in spite of repeated requests. In September that year, a round table of shipowner associations and IPTA urged the MSC to consider what additional measures may be appropriate, and stressed the need for all States to apply amongst others the IMO Guidelines on places of refuge for ships in need of assistance.

Following these incidents, and further prompted by the “*Maritime Maisie*” being held at sea off the coast of Japan for weeks after a collision and fire in December 2013, IUMI is, together with the International Chamber of Shipping (ICS) and the International Salvage Union (ISU), campaigning to urge governments to adopt the IMO places of refuge guidelines.

Four years after the “*MSC Flaminia*” incident, new emergency response procedures for ships in distress were agreed across the EU. Several industry stakeholders, including IUMI, participated together with EU Member States, the European Commission (EC), and EMSA in the drafting. The aim has been to ensure better coordination and exchange of information by providing guidance that will lead to better advised and quicker decision making. It is also emphasised that there shall be no denial of access on anything (commercial or financial) other than safety grounds.

Voluntary operational guidelines and expressed willingness to use them is only a first step to secure PoR access for stricken ships. While regulation is in place, the practical implementation offered by the new EU guidance complements IMO guidelines and should be encouraged internationally. IUMI therefore co-sponsored an EC information paper to the IMO’s Maritime Safety Committee in May 2016, and preliminary draft text of the revised guidelines to the Sub-Committee on Navigation, Communications and Search and Rescue in October 2019.

Furthermore, the true success of the operational guidelines will be demonstrated as actual incidents occur. While decision makers gathered in January 2016 for the launch of the new EU guidelines, the listing “*Modern Express*” was adrift in EU waters. Application of the guidelines for this and other incidents will be carefully monitored by IUMI and addressed in discussions with the Commission. Lessons learned will give input to the expected continuous improvement of the guidelines.

In August 2018, EU Member States together with the EC and industry organisations, including IUMI, proposed in a submission to MSC 100 a review of the IMO PoR guidelines. MSC subsequently agreed to include in its post-biennial agenda an output on “Revision of the Guidelines on places of refuge for ships in need of assistance (resolution A.949(23)), with two sessions needed to complete the item. In January 2020, the Sub-Committee on Navigation, Communications and Search and Rescue (NCSR) subsequently agreed to form a Correspondence Group and MSC 102 endorsed in November 2020 an accelerated process in which MEPC 76, LEG 108 and MSC 104 receive the draft text for approval in view adoption by Assembly in 2021.

Relevant authority / organisations and documents

- **IMO – MSC & MEPC & LEG & CCC:**

- MSC77/8/2: Places of refuge, submitted by IUMI, 14 February 2003.
- Resolution A.949(23): Guidelines on places of refuge for ships in need of assistance, 5 March 2004.
- MEPC64/INF.30 (27.7.2012) from ROPME/MEMAC and MSC91/21 (24.9.2012) from ICS, BIMCO, INTERCARGO, IPTA and INTERTANKO, concerning the “*M/T Stolt Valor*” incident.
- LEG101/11/4: Places of refuge for ships in need of assistance, submitted by ICS, IGP&I, IUMI & ISU, 14 March 2014.
- III1/INF.33: Port of refuge, Maritime Maisie, submitted by Hong Kong, China, 14 May 2014.
- MSC93: Statement made by Intertanko.
- CCC1/INF.2: Investigation on the fire and explosion on board the MSC Flaminia, submitted by Germany, 3 June 2014.
- MSC94/20/1: Guidelines on PoR – proposed additional text, submitted by Liberia, the Marshall Islands, IMPA, IFSMA, INTERTANKO, INTERCARGO and INTERMANAGER, 10 September 2014.
- MSC95/INF.8: Information on the work within the European Union on operational guidelines for places of refuge following recent incidents, submitted by EU Member States, the European Commission, IUMI, BIMCO, ICS, ISU, INTERTANKO and IGP&I, 31 March 2015.
- MSC96/24/5: Information on the EU Operational Guidelines on places of refuge, submitted by EU member states, EC, ICS, IUMI, BIMCO, ISU, INTERTANKO and IGP&I, 8 March 2016.
- MSC100/17/1: Proposal for a new output for a revision of resolution A.949(23) on Guidelines on places of refuge for ships in need of assistance, submitted by EU member states, EC, ICS, IUMI, BIMCO, ISU, INTERTANKO and IGP&I, 3 August 2018.

- NCSR7/13: Preliminary draft text of the revised guidelines, submitted by EU members states, EC, ICS, IUMI, IAPH, BIMCO, IACS, ISU, INTERTANKO and IGP&I, 15 October 2019.
- NCSR8/8: Report of the Correspondence Group on Revision of the Guidelines on places of refuge for ships in need of assistance, 15 January 2021.
- NCSR8/8/1: Comments on document NCSR 8/8, submitted by IACS, 11 February 2021.
- **EC/EU:**
 - Directives 2009/17/EG (23.4.2009) and 2002/59/EG (27.6.2002), mandating EU Member States to provide places of refuge for stricken vessels in order to prevent greater damage to the environment.
 - **EU Operational Guidelines on Places of Refuge, Version 4, 31 January 2017:** https://ec.europa.eu/transport/modes/maritime/digital-services/places-of-refuge_en
 - Joint declaration EU guidelines PoR, 27 January 2016.
- **U.S. Coast Guard:**
 - Places of Refuge Policy - Commandant Instruction 16451.9, 17 July 2007.
- **ICS, ISU & IUMI:** Joint press release 13 February 2014.
- **ICS, IGP&I, IUMI, ISU & Asian Shipowners' Forum:** Joint position paper April 2014.
- **UK SOSREP** presentation during Legal & Liability workshop, IUMI conference, London, 17 September 2013.
- **IACS:** Recommendations for the operation of shore-based emergency response services, 26 May 2016.

Timeline / important dates

- EC roundtable discussion with all relevant stakeholders during IMO MSC 94, London, 21 November 2014.
- EC: First discussion industry stakeholders on the Draft EU Operational Guidelines, Brussels, 15 January 2015.
- Political Forum workshop, IUMI conference, Berlin, 15 September 2015: Lemonia Tsaroucha, EC – DG MOVE.
- EU Operational Guidelines on Places of Refuge, 13 November 2015.
- EC event with members of European Parliament and industry, Brussels, 27 January 2016.
- MSC 96, 11-20 May 2016: Introduction of EU Operational Guidelines.
- MSC 100: 3-7 December 2018.
- NCSR 7: 15-24 January 2020.
- EC High Level Steering Group – Expert sub-group: “Cooperation group on places of refuge”, 12 January 2021.
- NCSR 8: 19 – 23 April 2021.
- Table Top Exercise, Copenhagen, 6-7 October 2021.
- Assembly 32: 29 Nov – 8 Dec 2021.

IUMI will:

- Actively promote better accommodation of ships in distress through the implementation and enforcement of existing measures.
- Support the EU Operational Guidelines on Places of Refuge and their implementation.
- Support and take part in a revision of IMO guidelines for Places of Refuge.
- Participate in table-top exercises and the EC HLSG Expert sub-group “Cooperation Group on Places of Refuge”.

10. Safety of container vessels

Brief description

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 ships. 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 firefighting capabilities are currently two of the main challenges related to this peril.

Container contents

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

In July 2019, IUMI co-sponsored a submission to the IMO Sub-Committee on Carriage of Cargoes and Containers (CCC) containing a proposal to undertake a comprehensive review of maritime special provisions that are often used to exempt goods from the safety provisions of the International Maritime Dangerous Goods (IMDG) Code. This was agreed by CCC in September 2019, and a Correspondence Group subsequently submitted a report in June 2020 with a proposal amongst others to establish a Working Group on charcoal at CCC 7.

Firefighting system on container vessels

It is noted that 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 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 and expressly welcomed by IUMI, a concern remains with the firefighting equipment on existing vessels. With the growing size of container vessels, 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 co-sponsored a submission to the IMO Maritime Safety Committee's 102nd session with a view to amend SOLAS. Due to COVID-19 and the interruption of IMO meetings, consideration of new outputs has been postponed until MSC 103 in May 2021. A group of experts has been formed to support the work if the new output is approved by MSC.

Relevant authority / organisations and documents

- **IMO - Maritime Safety Committee (MSC) and Sub-Committees on Dangerous Goods, Solid Cargoes and Containers (DSC), Sub-Committee on Fire Protection (FP) & on Carriage of Cargoes and Containers (CCC)**
 - FP 56/23 Annex 4 & 5: Report to the MSC, including recommendations on Suppression of fire and Guidelines for mobile water monitors, 31 January 2013.
 - MSC 92/8/2: Draft IMO Guidelines for the design, performance, testing and approval of mobile water monitors used for the protection of on-deck cargo areas designed to carry 5 or more tiers of containers on or above the weather deck, submitted by Denmark and Norway, 23 April 2013.
 - CCC1/INF.2: Investigation on the fire and explosion on board the MSC Flaminia, submitted by Germany, 3 June 2014.
 - MSC.1/Circ. 1497: IMO/ILO/UNECE Code of Practice for Packing of Cargo Transport Units (CTU Code), 16 December 2014.
 - MSC.1/Circ. 1498: Informative material related to the CTU Code, 16 December 2014.
 - MSC97/8/2: Fire pumps in ships designed to carry five or more tiers of containers on or above the weather deck, submitted by IACS, 12 September 2016.
 - CCC6/10/1: Revision of the inspection programmes for cargo transport units carrying dangerous goods, submitted by New Zealand and ICHCA, 5 July 2019.
 - CCC6/6/17: **Non-declaration and misdeclaration of dangerous goods – special provisions in the IMDG Code, submitted by Liberia, ICS, IUMI, BIMCO, ICHCA, IGP&I, IVODGA and WSC, 5 July 2019.**
 - CCC6/J/8: Draft terms of references for a correspondence group under Agenda item 6 on a review of maritime special provisions, 9-13 September 2019.
 - MSC102/21/3: Proposal for a new output to evaluate the adequacy of fire protection, detection and extinction arrangements on board containerhips to fight container fires, submitted by Marshall Islands, Singapore, AICS and WSC, 7 February 2020.

- [MSC102/INF.2](#): Information on insurance related economic aspects associated with containership fires, submitted by IUMI, 7 February 2020.
- [MSC102/INF.3](#): Analysis of current safety regulations concerning fire-fighting on board containerships, submitted by IUMI, 7 February 2020.
- [MSC102/21/7](#): Proposal for a new output for the fire protection on containerships regarding the review of relevant parts of SOLAS chapter II-2 with regard to fire protection in the cargo area on and under deck, submitted by the Bahamas, Germany, IUMI, BIMCO and CESA, 11 February 2020.
- [MSC102/21/13](#): Proposal for a new output on containers lost at sea, submitted by Vanuatu, 14 February 2020.
- [FAL44/2020 & CCC7/6/1](#): The role of the Rotterdam Rules in safety and facilitation, submitted by CMI, 14 February 2020.
- [MSC102/21/19](#): Comments and proposal for a new output on containers lost at sea, submitted by EU Member States & EC, 20 March 2020.
- [MSC102/21/24](#): Comments on documents MSC 102/21/3 and MSC 102/21/7, submitted by Liberia, ICS, ICHA, IG, IVODGA, ITF and WSC, 24 March 2020.
- [CCC7/6/2](#): Report of the Correspondence Group on a review of Maritime Special Provisions, 5 June 2020.
- [CCC7/6/12](#): Documentation requirements for exempted dangerous goods, submitted by Liberia, BIMCO, ICHCA, ICS, IG, IVODGA and WSC, 24 July 2020.
- **IUMI:**
 - Loss Prevention workshop London, 18 September 2013, Presentation of possible firefighting solution by Uwe-Peter Schieder, GDV.
 - Press release 20 September 2016; call for further industry cooperation to tackle containership fires.
 - [Memo & press release 19 September 2017: Fire-fighting on container vessels \(<https://iumi.com/opinions/position-papers>\)](#).
- **Committee on large Container Ship Safety** (Japan): Interim Report “MOL Comfort”, 17 December 2013 – Final Report March 2015.
- **ClassNK** Investigation Report on Structural Safety of Large Container Ships, 30 September 2014.
- **IACS**, Sub-working group on structural safety of large container ships: Unified Requirements that set out minimum scope for hull girder strength analysis; UR S11A and UR S34, adopted 1 June 2015.
- **U.S. Coast Guard**: Marine Safety Information Bulletin 009/16: U.S. Declares an Equivalency to Regulation VI/2 of SOLAS, 28 April 2016.
- **Cargo Incident Notification System (CINS):**
 - www.cinsnet.com
 - Guidance - Safety considerations for ship operators to risk-based stowage of dangerous goods on containerships, 25 November 2019.
 - Guidelines for the carriage of seed cake in containers, January 2020.
- **ABS:**
 - Fighting Fire on Container Ships, 2016.
 - Guide for fire-fighting systems for cargo areas of container carriers, October 2019.
- **Cefor**: Technical Forum memo 5 – Ultra Large Container Vessels, 13 March 2017.

- **German Federal Bureau of Maritime Casualty Investigation:** Investigation Report 15/19 – Fire in the area of the deck cargo on board the container ship Yantian Express in the Atlantic Ocean on 3 January 2019, 30 January 2020.
- **Tokyo MoU:** Safety Bulletin 03/20 – Safety risks of casualties caused by cargoes, May 2020.
- **CINS / IGP&I:** Guidelines for the carriage of seed cake (including seed meal) in containers, June 2020.
- **National Cargo Bureau:** White paper – A comprehensive holistic approach to enhance safety and address the carriage of undeclared, misdeclared and other non-compliant dangerous goods, 6 July 2020.
- **Cargo Integrity Group:** Quick guide to the UN-sponsored Code of Practice for Packing of Cargo Transport Units (the CTU Code), September 2020.
- **European Maritime Safety Agency:** Analysis of marine casualties and incidents involving container vessels, September 2020.
- **Transport Safety Investigation Bureau – Singapore:** Final report – Fire on board Maersk Honam at Arabian Sea on 6 March 2018, 5 October 2020.
- **CONTAIN:** Pilot project report – Exploring the challenges of containership fires, Danish Institute of Fire and Security Technology, 25 January 2021.

Timeline / important dates & decisions

- **CTU Code:**
 - Endorsed by
 - the Inland Transport Committee of the UNECE, at its seventy-sixth session, 25 to 27 February 2014,
 - the IMO Maritime Safety Committee, at its ninety-third session, 14 to 23 May 2014, and
 - the Governing Body of ILO, at its 322nd session, 30 October to 13 November 2014.
- Loss Prevention workshop, IUMI conference, Hong Kong, 24 September 2014.
- Final report Committee on large Container Ship Safety (Japan): March 2015.
- Entry into force of amended FSS Code & SOLAS regulation II-2/10: 1 January 2016.
- IUMI webinar: Mark Russell (Gard) on firefighting of container vessels and misdeclaration of container content, 2 November 2017.
- MSC 101 – IUMI lunch presentation, 5 June 2019.
- Gard conference, Arendal, 17-18 October 2019.
- Tripartite meeting, Tokyo, October 2019.
- SSE 7: 2-6 March 2020. IUMI lunchtime presentation by Are Solum (Gard), 4 March 2020.
- MSC 103: 3-14 May 2021.

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 ships.
- Support a new output at the IMO in view of amending SOLAS.
- Coordinate views and seek input from the IUMI Group of Experts.
- Support the NCB recommendations from July 2020 to address the carriage of undeclared, misdeclared and other non-compliant dangerous goods.

11. Safety of RoRo vessels

Brief description

Due to the “Norman Atlantic” fire just before New Year 2014 and the fire on the “Sorrento” in April 2015, IMO increased its focus on evacuation and the safety of RoRo vessels. MSC 95 highlighted the need for an international response, through the IMO, to evaluate the casualty reports from the marine accident investigations and act, as appropriate, to enhance the current safety regime.

Marine underwriters have witnessed that the frequency of fires in the Car/RoRo segment is at a level twice the frequency of fires on most other vessel types. Cargo fires are the most frequent type of fires, which could be related to the fire risk of cars in general, as well as challenges with detecting, locating and extinguishing fires on these vessels. Refrigeration units, charging of electric vehicles, stowaways and passengers on ro-ro decks are other factors that potentially increase the fire hazard.

Interferry released in March 2016 Operational Best Practice Guidance on ferry safety for ro-ro passenger ships. The key finding of their review is that more attention should be given on response time in case of an incident.

MSC 97 agreed in November 2016 to include in the 2016-2017 biennial agenda of the Sub-Committee on Ship Systems and Equipment (SSE), with the support of the Sub-Committees on Ship Design and Construction (SDC) and Human Element, Training and Watchkeeping (HTW), an output on “Review SOLAS chapter II-2 and associated codes to minimize the incidence and consequences of fires on ro-ro spaces and special category spaces of new and existing ro-ro passenger ships”. SSE agreed in March 2017 on a two-step approach: 1) the development of Interim Guidelines, and 2) the development of amendments to SOLAS and associated codes. The interim guidelines for minimising the incidence and consequences of fires on ro-ro spaces and special category spaces of new and existing ro-ro passenger vessels were approved by MSC 101 in June 2019. The guidelines cover prevention/ignition, detection/decision, extinguishing fires, containment and integrity of life-saving appliances and evacuation.

In December 2018, MSC approved a circular with revised guidelines for the design and approval of fixed water-based systems for ro-ro spaces and special category spaces, with application date 1 January 2021.

SSE agreed in March 2020 to re-establish the Correspondence Group on Fire Protection to consider amendments to SOLAS and relevant IMO instruments for new and existing ro-ro passenger vessels, and submit a report to SSE 8. MSC 102 approved in November 2020 amendments to the revised guidelines for the design and approval of fixed water-based fire-fighting systems for ro-ro spaces, extending the maximum height for these fire-fighting systems from 9 to 10 metres for alignment with the definition of special category spaces.

Carriage of lithium-battery vehicles present a particular challenge when a fire has broken out. In March 2020 during SSE 7, a document about risks associated with the transport of lithium-ion battery powered vehicles was introduced. As a follow up, interested Member States and international organisations can submit proposals for a relevant new output to address these risks. IUMI is supportive of further consideration of this as a new output.

Relevant authority / organisations and documents

- **IMO – Maritime Safety Committee (MSC) & Sub-Committee on Flag State Implementation (FSI)**
 - [FSI20/5/3](#): Accident reports on ro-ro ferry vehicle deck fires, submitted by the United Kingdom, 8 January 2012.
 - [FSI21/5](#): Casualty statistics and investigation, report of the Correspondence Group on Casualty Analysis, 28 November 2012.
 - [MSC96/INF.3](#): Electric mobility on ro-ro and ro-pax ships. Report of the Formal Safety Assessment study, 9 February 2016.
 - [MSC96/16/1](#): Formal Safety Assessment - Considerations on the revision of SOLAS regulation II-2/20 – fire safety in connection with the transport of vehicles with electric generators or electrically powered vehicles, submitted by the EC and Member States, 8 March 2016.
 - [MSC97/19/3](#): Work programme – Fire safety of ro-ro passenger ships, submitted by EU Member States and the EC, 1 August 2016.
 - [SSE4/INF.8](#): FIRESAFE study on fires on ro-ro decks spaces and special category spaces of ro-ro passenger ships, submitted by the EC, 13 January 2017.
 - [SSE5/INF.4](#): Information from several relevant studies, submitted by EC and the EU Member States, 8 December 2017.
 - [SSE5/WP.4](#): Report of working group, 15 March 2018.
 - [SSE6/6/1](#): Review of relevant recent accident investigation reports from the EU, submitted by the EC and EU Member States, 30 November 2018.
 - [MSC.1/Circ.1430/Rev.1](#): Revised guidelines for the design and approval of fixed water-based fire-fighting systems for ro-ro spaces and special category spaces, December 2018.
 - [SSE6/WP.4](#): Report of the working group, 7 March 2019.
 - [MSC.1/Circ.1615](#): Interim guidelines for minimizing the incidence and consequences of fires in ro-ro spaces and special category spaces of new and existing Ro-Ro passenger ships, 26 June 2019.

- SSE7/6: Report of the intersessional meeting of the Experts Group on Formal Safety Assessment, 5 December 2019.
- SSE7/6/6: Draft amendments to SOLAS regulation 11-2/20 regarding ships carrying lithium-ion battery vehicles, submitted by China, 8 January 2020.
- **Interferry**: RoRo Deck Fire Safety - Operational Best Practice Guidance, 8 March 2016 (MSC96/6/2).
- **DNV GL**: Fires on Ro-Ro decks, 20 June 2016.
- **European Maritime Safety Agency (EMSA)**: FIRESAFE – study investigating cost effective measures for reducing the risk from fires on ro-ro passenger ships, SP Technical Research Institute of Sweden, Bureau Veritas, Stena Rederi, December 2016.
- **IUMI**: **Position Paper: Fires on ro-ro passenger vehicle decks, 7 February 2017** (<https://iumi.com/opinions/position-papers>).
- **Alternative Fuel Vehicle Project**: Report: Safe transportation of alternative fuel vehicles, 13 June 2017.
- **Standard Club**: A master's guide to Fire Safety on Ferries, April 2018.
- **LASH FIRE** international R&D project: <https://lashfire.eu/>

Timeline / important dates

- MSC 97: 21-25 November 2016.
- IACS/IUMI Technical Cooperation Group: 6 June 2017.
- EMSA FIRESAFE study II, 2018.
- MSC 101: 5-14 June 2019.
- SSE 7: 2-6 March 2020.
- LashFire: September 2019 – August 2023.

IUMI will:

- Support Interferry RoRo Deck Fire Safety Operational Best Practice Guidance.
- Support ongoing work at the IMO to improve safety of RoRo vessels and Car Carriers.
- Support a new output at the IMO for consideration of risks associated with the transport of lithium-ion battery powered vehicles.

STANDING ITEMS

12. Macroeconomic factors

Brief description

Trade agreements

Multinational marine insurers are affected by a wide range of barriers of doing business abroad; limited movement of data across borders, unfair competition from state-owned enterprises, lack of transparency and need for due process of law, and forced local ownership and discrimination in obtaining business licenses and permits. Some countries also require that import or export shipments have to be insured by a locally registered insurer, while buyers are only allowed to buy insurance coverage for import shipments abroad or on basis CIF. Any agreement which leads to a reduction of the aforesaid restrictions would contribute to enable marine insurers to achieve their full potential.

Recent developments with a view to a “trade war” between large importing and exporting nations are affecting the movement of goods and trade flows. Consequently, this is also affecting marine insurance and the cargo market in particular.

WTO & TiSA

The World Trade Organization (WTO) is the global international organization dealing with the rules of trade between nations. The WTO agreements are important to ensure that trade flows as smoothly, predictably and freely as possible.

Since the World Trade Organization (WTO) established the General Agreement on Trade in Services (GATS) in 1995, trade in services has evolved dramatically due to technological advances, changing business practices, and deeper global integration. The dynamism and importance of trade in services contrast strongly with the slow pace of multilateral negotiations in this area. When the Doha Development Round of a multilateral trade negotiation reached an impasse, the idea of the Trade in Services Agreement (TiSA) was launched by the U.S. and proposed to a group of WTO members; the so-called Really Good Friends (RGF) group. The group met regularly from February 2012, but the proceedings came to a complete halt in January 2017 with the Presidency of Donald Trump in the U.S.

TiSA represents an opportunity to improve and expand trade in services. Major and fundamental barriers to trade in services are addressed, and a more liberal approach to cross-border regulation in areas such as marine and energy insurance has been suggested. IUMI supports the TiSA process, and encourages the proceedings to resume in the near future.

Brexit

Following the UK vote in June 2016 to leave the European Union there has been ongoing negotiations about what any future post-Brexit trading relationship might look like. Following the triggering of Article 50 of the Lisbon Treaty in March 2017, the UK initiated the process of formally exiting the EU and this became effective as of 1 January 2021 when the transitional period expired.

Additionally, until the end of the transitional period on 31 December 2020, the UK was treated as an EU member state by the EEA-EFTA states. Accordingly, the rights and obligations contained in the EEA Agreement continued to apply between the UK and the EEA-EFTA states. The prevailing view is that the UK ceased to be a party to the EEA Agreement on 31 January 2020, when it withdrew from the EU. Accordingly, after the end of the transitional period, the UK is a third country within the meaning of the EEA Agreement and the territory of the UK is no longer part of the EEA.

Two kinds of negotiations took place simultaneously and, indeed in some areas, remain ongoing.

1. The Withdrawal Agreement – the terms on which the UK departs the EU. Key political issues included the financial settlement, citizens' rights and the Irish border.
2. The Future Economic Partnership – the new relationship between the EU and the UK. Key issues included goods, agricultural, food, fishery products, customs, transport, energy and services including financial services. A trade deal has been agreed but does not cater for financial services.

For financial services, industry bodies have argued for a bespoke trade deal or, failing that, agreed regulatory equivalence to manage the post-Brexit UK / EU relationship. We currently have neither, posing questions on the implications for London market insurers providing cross-border (re)insurance into the EU (and vice-versa) and, also, the wider impact of Brexit on maritime insured's in their day-to-day operation.

To combat the loss of EU passporting rights, most UK based insurers have adapted their corporate structures to operate via subsidiaries within an EU State, at least until there is a future agreement. Dublin and Luxembourg are the two most popular although Brussels, Paris, Munich, Malta and Lichtenstein are all chosen options depending on the business operation of the insurer. Most insurers wish to continue to use resources based in London and to retain minimal risk within the new EU subsidiary, at least in the early years of operation. EU entities wishing to underwrite UK business need to have an authorised branch or subsidiary already in place or be in the process of creating one and therefore in the UK Temporary Permissions Regime (TPR). To continue trading in the UK under the TPR regime, firms must have submitted an application for UK authorisation before the (now expired) deadline in order to be considered 'in' the TPR regime while they await full authorisation.

For those contracts requiring run-off following Brexit, the UK gives EEA insurers a 15 year period (part of the Financial Services Contracts Scheme). Individual EU States have differing rules for UK insurers running off business, but all ensure that insureds are not disadvantaged.

On a future services deal for insurance, it should be noted that equivalence has significant limitations since Solvency II has no equivalence regime for direct insurance, and the Insurance Distribution Directive - which gives cross border access to brokers - has no equivalence regime and no third country branch regime. Consequently, an enhanced equivalence regime has been proposed by the London market associations, based on Solvency II precedents, to cover large risks (i.e. including marine).

The difficulty in the negotiations on equivalence is future divergence. Here, the UK Government are pushing for "structured withdrawal of equivalence", which would make the ongoing assessment of equivalence less political and increase certainty for both the EU and UK in the longer term. The aim is to ensure equivalence could not be withdrawn at short notice. In particular, the insurance

industry would like to see the establishment of a Financial Regulatory Forum, enabling a regular exchange of information and consultation between the financial services regulators of the UK and EU, most notably on the implementation of international standards. This Forum could be used to monitor equivalence assessments.

With no current regulatory equivalency in place, from a supervisory perspective the UK will be treated as a “third country” in relation to the EU. In a pre-emptive move, the UK Government has assessed and granted equivalence to EU reinsurers. Therefore, similar reciprocity is awaited with optimism by the London market.

The EU has already reached an agreement with certain UK central counterparties, but the bloc has not confirmed whether it will assess the UK’s equivalence for reinsurance purposes under the Solvency II framework. USA, Japan and Bermuda currently hold reinsurance equivalence with the EU although the Japanese agreement is subject to renewal, having expired on 31 December 2020.

However, UK-based underwriters will still be able to write reinsurance business originating from the majority of EEA countries on a cross-border basis as long as local regulatory requirements are met. That is not the case for German or Polish reinsurance business however, and those risks will have to be written via an EU subsidiary. The UK Government has also published a guidance document for the UK’s equivalence framework for financial services. This outlines the principles and processes which will govern the UK’s equivalence framework from the end of the transition period. In addition, HM Treasury has published a table of its equivalence decisions and an annex showing the lead regulator for each of the decisions.

Whilst the current lack of a financial services deal is disappointing, the two sides have at least committed to a Memorandum of Understanding that would allow for close coordination, including the sharing of information, while also ensuring that each side can take autonomous decisions on financial markets regulation. It is hoped this will be revealed by the end of March 2021. Moreover, the insurance industry will welcome the fact that a deal has been reached as it reduces uncertainty and the cost of cross-border business for the real economy customers of financial services firms. It also sets a more positive environment for the discussions which are still to conclude on equivalence and regulatory cooperation.

Whether the UK will become a contracting party to the EEA Agreement in the future is currently not apparent. If the EEA territory is expressly referred to in insurance conditions, the territorial scope of the insurance cover may change. Likewise, the insured interest may change if it is linked to conduct by authorities from states in the EEA area.

Overall, disruption to insurance contracts has been managed and largely limited to back office and operational complexities. On the maritime sector, though the trade and cooperation agreement between the EU and the UK regulates, among other things the conditions for duty-free goods traffic, there is a customs border created between the UK and EU (with special status for Northern Ireland). This may make the processing of customs formalities more complex and bureaucratic, and thus possibly also more susceptible to errors in the execution of customs orders. This can lead to a changed risk situation for insurance products that cover customs claims. The impact on shippers and supply chains of the expected delays at ports caused by border checks, increased paperwork and the availability of qualified staff has not yet flowed through into insurance claims and, thinking optimistically, may be short-lived. As always, the response of the cargo, freight forward or other relevant policies will depend on their specific terms – whether, for example, delay claims are excluded - and the specific policy trigger.

China

The Chinese Government deems Free Trade Agreements (FTAs) as a new platform to further opening up to the outside and to speeding up domestic reforms. This is seen as an effective approach to integrate into the global economy and to strengthen economic cooperation with other economies. It is also considered an important supplement to the multilateral trading system. Currently, China has signed and implemented 16 FTAs, and an additional 8 are being negotiated.

Transport networks

Large investments in transport networks may have an impact on marine insurers by fostering existing trade routes and facilitating new ones.

Belt and Road Initiative

China's Belt and Road Initiative (BRI) focuses on connectivity and cooperation throughout Eurasia and the Pacific, involving some 68 countries. The initiative aims to bridge the "infrastructure gap" in Asia and beyond through a network of roads, ports, bridges, tunnels and pipelines. The BRI comprises "The Silk Road Economic Belt" and the "21st century Maritime Silk Road". China's new foreign investment law that commenced on 1 January 2020 opens foreign company participation in BRI procurement projects.

EU TEN-T

The Trans-European Transport Network (TEN-T) is a European Commission policy directed towards the implementation and development of a Europe-wide network of roads, railway lines, inland waterways, maritime shipping routes, ports, airports and rail-road terminals.

The ultimate objective of TEN-T is to close gaps, remove bottlenecks and eliminate technical barriers that exist between the transport networks of EU Member States, strengthening the social, economic and territorial cohesion of the Union and contributing to the creation of a single European transport area. The policy seeks to achieve this aim through the construction of new physical infrastructures; the adoption of innovative digital technologies, alternative fuels and universal standards; and the modernising and upgrading of existing infrastructures and platforms.

Relevant authority / organisations and documents

TiSA:

- **WTO** – General Agreement on Trade in Services (GATS), 1995.
- **Industry position papers:**
 - Insurance Europe, 10 June 2013.
 - Global Federation of Insurance Associations (GFIA), 28 November 2013.
 - **IUMI, 6 November 2014 (<https://iumi.com/opinions/position-papers>).**
- **Global Reinsurance Forum:** Reinsurance trade barriers and market access issues worldwide, July 2018.

Brexit:

- **European Commission**
 - European Commission notice on post-Brexit servicing of existing contracts.
 - DG MOVE notice to stakeholders: Withdrawal of the United Kingdom and EU rules in the field of aviation security and maritime security, 5 July 2018.
- **UK Parliament**
 - The European Union (Withdrawal) Act 2018.

- Chequers White Paper “the future relationship between the United Kingdom and the European Union”.
- **UK Department for Exiting the EU**
 - Government Position Paper: Future customs arrangements, 15 August 2017.
- **London Market Group / UK Government Liaison Group**
 - LMG: A Brexit roadmap for the UK specialty commercial insurance sector.
- **Insurance Europe / Task Force 50 Liaison Group.**
- **HM Treasury:** Guidance document for the UK’s equivalence framework for financial services, 9 November 2020.
- **GOV.UK:** Transporting goods between Great Britain and the EU: guidance for hauliers and commercial drivers, 8 January 2021.
- **UK Financial Conduct Authority:** Flowchart – How the TPR and financial services contracts regime will enable EEA-based firms to continue operating in the UK after the end of the transition period.
- **TT Club:** Brexit analysis for supply chain stakeholders.

China FTA network:

- <http://fta.mofcom.gov.cn/english/index.shtml>

BRI:

- **The People’s Republic of China:**
 - Vision for maritime cooperation under the Belt and Road Initiative, 20 June 2017.
 - China’s Arctic Policy, 26 January 2018.

TEN-T:

- https://ec.europa.eu/transport/themes/infrastructure_en

Timeline / important dates

TiSA:

- Currently on hold.

Brexit:

- Brexit referendum: 23 June 2016.
- Start of Brexit negotiations: 19 June 2017.
- Withdrawal Agreement covering financial settlement, citizens’ rights and Northern Ireland: December 2017.
- UK original exit date from EU: March 2019.
- Extension of Brexit until 31 October 2019.
- Majority of MPs vote in favour of Withdrawal Agreement, 20 December 2019.
- Brexit: 31 January 2020.
- Transition period until 31 December 2020.

BRI:

- The People’s Republic of China, announcement of the Belt and Road Initiative by President Xi Jinping in September & October 2013.
- IUMI conference: Presentation by Wai Yue Loh, Ince & Co, Tokyo, 20 September 2017.

TEN-T:

- Funding period 2014-2020 for 9 Core Network Corridors.

13. Maritime security / piracy

Brief description

Best Management Practice (BMP) 5, use of private armed security guards, UN and IMO guidelines, national regulations, legality of payment of ransoms, and ISO rules for the use of force are some of the issues still very much on the international maritime security agenda.

The International Maritime Bureau (IMB) reported 195 piracy and armed robbery incidents worldwide in 2020 against 162 in 2019. The rise is attributed to an increase of piracy and armed robbery reported within the Gulf of Guinea as well as increased armed robbery activity in the Singapore Straits. Of the 135 kidnapped crew, the Gulf of Guinea accounted for over 95%. With a rise in kidnapping incidents further away from shorelines, IMB now advises vessels in the region to remain at least 250 nm from the coast at all times, or until the vessel can transit to commence cargo operations at a berth of safe anchorage. A maritime security working group is expected to be convened at the IMO's Maritime Safety Committee (MSC) meeting in May 2021 with an aim to discuss further collaboration and possible action to address piracy in the Gulf of Guinea.

In January 2021, the EU Council approved the launching of the first pilot case of the Coordinated Maritime Presences (CMP) concept in the Gulf of Guinea (GoG). The pilot will support efforts by the coastal states and the organisation of the Yaoundé Architecture to address increasing security challenges such as armed piracy and kidnapping for ransom, which undermine maritime security and good governance of the oceans.

ReCAAP ICS reported a total of 97 incidents in Asia in 2020, accounting for a 17% increase compared to 2019. The increase of incidents occurred in Bangladesh, India, the Philippines, Vietnam, South China Sea and Singapore Strait. One of the particular concerns in 2020 was the continued increase of incidents on board ships while underway in the Singapore Strait in 2020 with 34 incidents, compared to 31 incidents in 2019.

The situation of abduction of crew in the SuluCelebes Seas and waters off Eastern Sabah remains a concern, as well as the increase in sea robbery in the Philippines, with 13 reported incidents in 2020 compared to seven during the entire 2019. More than 50% of these incidents occurred at Manila anchorage, where a large number of ships have been anchored due to the coronavirus pandemic with the Port of Manila nominated as crew change hub. In view of the increase of incidents, the ReCAAP ISC recommends to the law enforcement agencies in Asia to enhance surveillance, increase patrols and respond promptly to incidents reported by ships, in order to arrest and prosecute the perpetrators. Ship masters and crew are strongly advised to exercise vigilance, maintain constant lookout for suspicious boats in the vicinity, report all incidents immediately to the nearest coastal State, and implement preventive measures recommended in the "Regional Guide to Counter Piracy and Armed Robbery Against Ships in Asia".

There were no reported incidents from Somalia, but IMB continues to advise that vessels and crew remain cautious with the security concerns in the Gulf of Aden and the Indian Ocean still present. In consequence, insurers will continue to ask owners about their security precautions in this region.

The EU Maritime Security Revised Action Plan was adopted in June 2018. The revised Plan underlines that international cooperation at sea is instrumental to achieve safe and secure seas across regions and improve global maritime security. Although NATO reassigned its counter-piracy mission in the Indian Ocean in November 2016, the European Union has extended its counter-piracy operation until 31 December 2022. In June 2017, the IMO Secretary-General, Mr Kitack Lim, called upon governments to continue to provide naval assets to the area, underlining that the situation remains a cause for concern. IUMI notes the continuing support from EU and the Combined Maritime Forces (CMF) and believes the extended security corridor to be prudent.

With drawdown and the passage of time in mind, the 5th edition of the piracy-specific Best Management Practice (BMP5) was published in June 2018. BMP5 compiles 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.

In March 2020, a new publication offering Best Management Practices to Enhance Maritime Security for Vessels & Mariners Operating Off the Coast of West Africa including the Gulf of Guinea (BMP WA) was published. The BMP WA is the result of a collaborative work between industry organisations, supported by government and military organisations, to help mariners detect, deter and delay external threats to their safety in this region.

Tensions in the Strait of Hormuz

The countries around the Gulf possess almost half of the world's oil reserves and have often been a focus of tension. Estimates vary, but at least 20% of the world's oil and 25% of its LNG pass through the narrow Strait of Hormuz.

The US political strategy of exerting maximum pressure to prevent Iranian nuclear progress is creating new strains for commerce. The situation has evolved considerably since the vessel attacks at Fujairah/Strait of Hormuz in May/June 2019. In July 2019, Iran openly seized vessels in direct but intentionally proportionate retaliation to Gibraltar's detention of the *Grace 1* for breaching EU sanctions on Syria.

Although international shipping is clearly at risk, the international response has been mixed and disconnected. US navy vessels are in the area, and in 2019 the United States launched a new maritime security initiative for the Persian Gulf region. In early 2020, several EU member states, including Belgium, Denmark, France, Germany, Greece, the Netherlands and Portugal, established a European Maritime Surveillance Mission in the Strait of Hormuz (EMASOH) to maintain freedom of navigation in the area. EMASOH aims to decrease tensions in this region of strategic interest. The operation is open to other countries to join. An escort programme by the UK offers welcome support to UK flagged vessels.

IUMI urges a lasting solution to ensure the safe passage of vessels and crew in the Strait of Hormuz and the Persian Gulf. With no identifiable resolution in sight, underwriters are faced with great uncertainties and have to be alive to developments. Shipowners are largely required to notify their underwriters, who will then have the chance to assess individual voyages to the area.

Relevant authority / organisations and documents

- **International Maritime Organization (IMO)**
 - Global Integrated Shipping Information System (GISIS): Recent reported incidents of piracy & armed robbery: <http://gisis.imo.org>
 - MSC Circular 1405/Rev.2 (as amended): “Revised interim guidance to shipowners, ship operators and ship masters on the use of privately contracted armed security personnel on board ships in the High Risk Area”, released 25 May 2012.
 - MSC 92/INF.14: “International model set of rules for Rules for use of Force” (RuF), submitted by Marshall Islands, ICS, ISO and BIMCO, 9 April 2014. Also used as input to ISO TC 8.
 - MSC.1/Circ.1406/Rev.3: Revised interim recommendations for flag states regarding the use of privately contracted armed security personnel on board ships in the High Risk Area, 2 June 2015.
 - MSC.1/Circ.1585: Reporting of incidents of piracy and armed robbery against ships in the Gulf of Guinea, 5 July 2017.
 - MSC.1/Circ. 1601: Revised Industry Counter Piracy, December 2018.
 - MSC101/18/1: Review of the High-Risk Area for piracy in the Indian Ocean, submitted by ICS, BIMCO, OCIMF, INTERTANKO and INTERCARGO, 11 March 2019.
 - 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.
- **International Organization for Standardization (ISO)**

ISO/PSA 28007:2012 Ships and marine technology – Guidelines for Private Maritime Security Companies (PMSC) providing privately contracted armed security personnel (PCASP) on board ships (and pro forma contract), published 14 March 2013.
- **ICS & ECSA**: Comparison of flag state laws on armed guards and arms on board, November 2013.
- **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**
 - Special Circular No. 1 – 20 February 2014 on recommended amendments to GUARDCON for use off West Africa.
 - IGP&I GUARDCON West Africa – IG clubs’ version including the recommended amendments in Circular 1, 9 April 2014.
- **European Union**:
 - Gulf of Guinea strategy, 17 March 2014.
 - Council Decision (CFSP) 2020/2188, amending and extending the mandate of the EU Naval Force Somalia Operation Atalanta until 31 December 2022.
- **EU Naval Force (EU NAVFOR)** – Operation Atalanta: <http://eunavfor.eu/>
- **ICC International Maritime Bureau – Piracy Reporting Centre**: <https://www.icc-ccs.org/piracy-reporting-centre>

- **Maritime Security Centre Horn of Africa (MSCHOA):** www.mschoa.org
- **Joint War Committee (JWC):** Listed areas, revised 10 December 2015.
- **IUMI: [Position Paper - Piracy and its suppression, 29 January 2016.](#)**
- **ReCAAP – www.recaap.org:**
 - Guide for Tankers Operating in Asia Against Piracy and Armed Robbery Involving Oil Cargo Theft, 25 November 2015.
 - Regional Guide to Counter Piracy and Armed Robbery Against Ships in Asia, 17 February 2016.
 - Guidance on abduction of crew in the Sulu-Celebs seas and waters off Eastern Sabah, July 2019.
- **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.
- **Maritime Global Security website: www.maritimeglobalsecurity.org**
 - Global counter piracy guidance for companies, masters and seafarers, June 2018.
 - The 3rd edition of the guidelines for owners. Operators and masters for protection against piracy and armed robbery in the Gulf of Guinea, 3 June 2018.
- **Best Management Practices to Deter Piracy and Enhance Maritime Security off the Coast of West Africa including the Gulf of Guinea (BMP WA), 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.

Timeline / important dates

- ISO/PSA 28807:2012: Published 14 March 2013.
- IUMI conference 15-18 September 2013, focusing on Gulf of Guinea.
- NATO terminated its counter-piracy mission November 2016.
- EU NAVFOR (Operation Atalanta) extended until 31 December 2022.

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 IOS 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.

14. Sanctions

Brief description

International sanctions as a tool for countries to act against others for political reasons influence the global maritime industry on a daily basis.

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.

Several markets have issued optional sanctions clauses to comply with these regimes. In addition, proper due diligence is recommended from individual insurers.

The list below, while not necessarily complete, provides guidance on where information can be found from three key sanction regimes.

Key sanction regimes – information links

- **United Nations:**
 - General Information about Sanctions:
<https://www.un.org/securitycouncil/sanctions/information>
- **United States of America:**
 - U.S. Office of Foreign Assets Control (OFAC) Sanctions List Search:
<https://sanctionssearch.ofac.treas.gov/>
 - U.S. Treasury OFAC Sanctions Programs:
<https://www.treasury.gov/resource-center/sanctions/Programs/Pages/Programs.aspx>
 - U.S. Treasury OFAC Recent Actions:
<https://www.treasury.gov/resource-center/sanctions/OFAC-Enforcement/Pages/OFAC-Recent-Actions.aspx>
 - OFAC SDN List:
<https://www.treasury.gov/resource-center/sanctions/sdn-list/pages/default.aspx>
 - [OFAC Guidance to address illicit shipping and sanctions evasion practices \(14 May 2020\)](#)

- **European Union:**
 - EU Consolidated list of sanctions:
https://eeas.europa.eu/headquarters/headquarters-homepage/8442/consolidated-list-sanctions_en
 - Updated blocking statute in support of Iran nuclear deal:
http://europa.eu/rapid/press-release_IP-18-4805_en.htm
 - EU Sanctions Map:
<https://www.sanctionsmap.eu/#/main>
- **United Kingdom:**
 - HM Treasury – Financial sanctions targets by regime:
<https://www.gov.uk/government/collections/financial-sanctions-regime-specific-consolidated-lists-and-releases>
 - UK Office of Financial Sanctions Implementation:
<https://www.gov.uk/government/organisations/office-of-financial-sanctions-implementation>
 - OFSI Financial sanctions guidance for entities and individuals operating within the maritime shipping sector (December 2020):
[OFSI Guidance - Maritime .pdf \(publishing.service.gov.uk\)](#)
 - New legislation after transitional period (end 2020):
<https://www.gov.uk/government/collections/uk-sanctions-regimes-under-the-sanctions-act>
- **IUMI:** OFAC webinar 10 June 2020
- **BIMCO:** [Sanctions clause for container vessel time charter parties 2021.](#)

15. Theft prevention / safe and secure parking places

Brief description

The European Union stated in a 2009 study that each year direct and consequential claims arising to an amount of EUR 8 billion are caused by theft from means of transport. Intrusion is the preferred modus of operation of cargo thieves, and trucks parked in unsecured parking locations are the main target. The fact remains that there are far too few secured parking areas. At the same time, the perpetrators are acting in an increasingly organized fashion, and make use of the constantly growing online connectivity to expand their *modi operandi* to include cyber-related cargo crimes. The misuse of online freight exchange platforms is an example of this, with criminals taking on the identity of legitimate freight carriers, using their employees' names,

companies and logos, to organise thefts of cargo offered for transport on those electronic freight platforms.

Both for cargo and forwarders' liability insurance, only effective loss prevention measures make some types of transport insurable. For example, the German Insurance Association (GDV) has developed a manual for the construction and operation of high-security truck parks, and the American insurance industry has developed data and recommendations on static and in transit cargo loss prevention as well as data on truck stop thefts pinpointing the locations of facilities victimized. The Transported Asset Protection Association (TAPA) has developed security standards⁶ and makes these available with regular updates. Information about secure parking areas are also available in several countries. Work on a TAPA Supply Chain Cyber Security Standard is currently underway and scheduled to be rolled out in 2021.

In January 2017, the European Commission DG MOVE contracted Cross-border Research Association (CBRA) and TAPA EMEA to develop new security guidelines for the European freight transport sector. The new security toolkit "ROADSEC" was published in January 2018, providing operational guidance that will help truck drivers, haulage companies and other key stakeholders to address cargo theft, robberies, irregular migration, and terrorism on European roads.

IUMI has published a position paper outlining the increasing problem of cargo theft and calling on law enforcement agencies to improve and enhance their cross-border cooperation. Recommendations for industry and supply chain stakeholders are also included in the paper. In addition to the current measures and continued theft prevention activities by the industry, IUMI urges the following actions for the prevention of cargo theft:

- Relevant authorities should develop an overview of the cargo theft situation, including the theft of trailers and containers, in their respective country or region. Based on these findings and in discussion with insurers and other industry stakeholders, decisions should be made on how to deal with the aforementioned hotspots and future measures against cargo theft.
- Exchange of best practices across borders on local initiatives has proven to be successful and should be continued.
- Improve law enforcement through transnational coordination and cooperation between countries and national law enforcements. Dedicated cargo theft taskforces should be established to allow law enforcement agents to work with their peers in other states or countries to develop effective networks and to solve cross-jurisdictional cases. The private sector should be involved in such task forces.
- Create special police units and specialised departments of public prosecution dealing with cargo crime.
- As criminals use the internet, specific attention should be given to cyber fraud, such as with bills of lading and permits as well as fake carriers.

⁶ FSR = Freight Security Requirements
TSR = Truck Security Requirements
PSR = Parking Security Requirements
Multi-site certification for FSR
TAPA Supply Chain Security Standard, and TSR Modular Standard are currently in the development phases

- Increase police presence in commercial truck parking areas and cargo storage facilities, especially at night, weekends and during holidays.
- Create a network of high-security, accessible and affordable truck parks.

Introducing these measures would facilitate the safe and secure flow of goods within the global supply chain and increase the safety of people working in the transport sector.

Relevant authority / organisations and documents / links

- **National** authorities / ministries of transport
- **EC (DG Mobility and Transport)**
 - TEN-T: Trans European transport network guidelines.
 - EC Regulation 561/2006 on driving times.
 - Directive 2003/59/EU driver training – crime prevention.
 - Directive 2008/96/EC road infrastructure safety management.
 - Directive 2010/40/EU on the framework for the deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other modes of transport.
 - Council Resolution 8/9 November 2010 on secure TPAs.
 - Delegate Regulation (EU) No 886/2013 with regard to data and procedures for the provision, where possible, of road safety-related minimum universal traffic information free of charge, 15 May 2013.
 - Study on Safe and Secure Parking Places for Trucks, February 2019 & EC response, 11 March 2019.
- **SETPOS** – secure European truck park: www.setpos.eu
- **LABEL** – classification of TPAs for security and comfort quality standards: www.truckparkinglabel.eu
- **TRANSPark** (International Road Transport Union (IRU): www.iru.org/transpark-app
- **TRUCKinform** (The European truck parking information portal): www.truckinform.eu
- **Road Haulage Association**: www.rha.uk.net
- **IUMI national associations' web pages** (in particular):
 - Italy: Website with list of secure parking areas and stop areas, prepared by ANIA: GEOSOSTA.
 - Germany: High-security truck park – Non-binding security recommendations: http://www.tis-gdv.de/tis_e/bedingungen/parken/parkplatz_gesichert/inhalt.htm
 - Netherlands: www.verzekeraars.nl
- **Cargo workshop**, IUMI conference London, 16 September 2013: “Tackling global theft through the Label Initiative”, Eric de Smet, Baloise Insurance, Antwerp
- **IUMI Position Paper on Theft prevention, 17 September 2019.**
- **Transported Asset Protection Association (TAPA):**
 - Incident Information Services – & Secure Parking (EMEA region – Europe, Middle East and Africa).
 - Parking Security Requirements (PSR) 2018: <https://www.tapa-global.org/standards/psr/download-section.html>
 - Facility Security Requirements (FSR) 2020:

- <https://www.tapa-global.org/standards/fsr/tapa-fsr-2020-standard.html>
 - Trucking Security Requirements (TSR) 2020:
<https://www.tapa-global.org/standards/tsr/tapa-tsr-2020-standard.html>
- **Project ROADSEC:** Security toolkit for truck drivers www.roadsec.eu
- **BSI & TT Club:** Cargo theft report 2021, February 2021.

Timeline / important dates

- Political Forum workshop, IUMI conference Berlin, 15 September 2015: “Theft prevention; IUMI position and recommendations”, Håkan Nyström, AIG.
- Meeting with DG MOVE – Security, Brussels 18 October 2016.
- David Taylor (Loss Prevention Committee) presentation in TAPA conference 17-18 November 2016 & 25-26 October 2017.
- New security guidelines for the European road freight transport sector (ROADSEC), January 2018.
- Panel discussion EC DG MOVE TEN-T Days, Ljubljana, 25 April 2018.

IUMI will:

- Encourage and support measures that contribute to facilitate the safe and secure flow of goods within the global supply chain and increase the safety of people working in the transport sector.
- Urge the following actions in addition to current measures and continued theft prevention activities by the industry:
 - Relevant authorities should develop an overview of the cargo theft situation, including the theft of trailers and containers, in their respective country or region. Based on this, and in discussion with insurers and other industry stakeholders, decisions should be made on how to deal with the aforementioned hotspots and future measures against cargo theft. Exchange of best practices across borders on local initiatives proven to be successful is encouraged. Improving law enforcement through transnational coordination and cooperation between countries and national law enforcements.
 - Create special police units and specialised departments of public prosecution dealing with “cargo crime”.
 - Increase police presence in commercial truck parking areas and cargo storage facilities especially during night-time, weekends and holidays.
 - Create a network of high-security, accessible and affordable truck parks.
- Monitor and inform on relevant new initiatives and best practice.