

# IUMI Policy Agenda

## 1. 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.

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

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

In April 2022, MSC 105 agreed to develop a goal-based Code for MASS. Work has since progressed, and MSC has agreed that the Code will apply to SOLAS cargo vessels only. It is further agreed in principle that the Code should contain a risk-analysis based approach, that a human master shall be responsible regardless of the vessel's mode of operation and that there is no need to amend COLREGS to accommodate MASS at this

stage. A non-mandatory MASS Code is planned to be ready by 2025. This will be followed by an experience-building phase. The earliest possible entry into force of a mandatory MASS Code through amendments of SOLAS and other IMO instruments will be 1 January 2032.

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

## Trucks

Autonomous trucks have the potential to make freight transport more efficient, cost-effective, reliable, sustainable and, above all, safer. Autonomous trucks also hold the potential to solve one of the biggest problems plaguing the trucking industry – a massive labour shortage. These factors are driving the demand for self-driving trucks.

In 2019, experts from the World Forum for Harmonization of Vehicle Regulations (WP.29) – a subsidiary body of the Inland Transport Committee (ITC), the UNECE's highest political body in the field of transport, developed a Framework Document to guide the future normative work of the United Nations on this strategic area for the future of mobility. WP.29 adopted in 2021 an amendment to a United Nations Regulation on Automated Lane Keeping Systems (ALKS) that lays down the technical requirements for their use in heavy vehicles including trucks, which makes it the first binding international regulation for the introduction of so-called SAE Level 3 vehicle automation in heavy vehicles on the roads. However, there is no harmonized, globally applicable legal framework existing. A good overview of regulations as well as strategies at national and international level can be found at [Connected and Automated Driving \(CAD\)](#).

Along with safety also liability issues become more complex as the responsibility for accidents may shift from the driver to the technology provider or other parties involved in the design, production, or maintenance of the truck. In this regard the European Commission published in 2022 its proposal for a directive revising the existing Product Liability Directive (PLD). The PLD introduced a common set of rules enabling harmonization and an equal level of protection of consumers throughout the single market using the concept of strict liability of producers for damage caused by defective products which means that the liability does not depend on fault or negligence of the manufacturer. This may raise questions regarding insurance coverage and liability. European countries



typically require compulsory motor vehicle insurance to cover accidents caused by trucks. Insurance policies may also need to adapt to accommodate autonomous vehicles' related risks, such as cybersecurity incidents or liability shifts between drivers and manufacturers.

#### *Timeline / important dates*

- MSC scoping exercise June 2017 - June 2020.
- LEG scoping exercise April 2018 – July 2021.
- Target completion year within MSC for a non-mandatory code: 2025.
- Joint MSC-LEG-FAL WG meeting: 8-10 May 2024.
- MSC 108: 13-24 May 2024

#### *IUMI will:*

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