

MSC 108 Summary Report

The 108th session of the International Maritime Organization (IMO) Maritime Safety Committee (MSC 108) was held at the IMO headquarters in London from May 15 to 24, 2024. Lydia Ferrad, member of the ITF MSC and Odd Rune Malterud, Chair of the ITF MSC participated in this meeting as part of the International Transport Workers' Federation (ITF) delegation.

Key Issues Discussed

The committee addressed several critical issues related to maritime safety, including.

- **Development of a Safety Regulatory Framework:** Aimed at reducing GHG emissions from ships through new technologies and alternative fuels.
- **Maritime Autonomous Surface Ships (MASS):** Progress on developing a goal-based instrument for autonomous ships.
- **Strengthening Maritime Safety Measures:**
 - Including consideration of violence and harassment as part of the maritime safety.
 - Amendments to the SOLAS 74 Convention and its related instruments
 - Revision of guidelines on maritime cyber risk management (MSC-FAL.1/Circ.3/Rev.2) and next steps for enhancing maritime cybersecurity.
 - Training and Certification of Fishing Boat personal/engineers and Consideration of a new regulatory code.
 - Medical Examination Guidelines of fishers.
 - Piracy and Armed Robbery: Ongoing issues and safety concerns.
 - Domestic Ferry Safety: Addressing safety concerns for domestic ferry operations.

Outcomes from MSC 108

1. Adoption of the amendment to STCW Table A-VI/1-4:

- Adoption of mandatory training on bullying, harassment, violence, sexual assault, and sexual harassment as part of basic safety training for seafarers.
- The amendment should be deemed to have been accepted on 1st July 2025 and enter **into force on 1st January 2026**.

the identification of bullying, harassment, violence, sexual assault, and sexual harassment as part of onboard safety and incorporating it into the STCW convention, automatically extend its application to the ISM code and make it prevention and mitigation mandatory for all. Paragraph 1.1.10 of the ISM Code addresses "serious threats to the safety of personnel," while paragraph 1.2.1 emphasizes the obligation to "ensure safety at sea." Furthermore, paragraph 1.2.2, which pertains to company objectives, mandates clear statements on the prevention and mitigation of safety issues. Additional paragraphs within this code are relevant to this issue, notably 1.2.3 and paragraphs 6.2 to 6.4.

2. Amendment to 1995 STCW-F convention and new STCW-F code:

- The title of chapter II of the Convention has been changed, and now read "**Certification of skippers, officers, engineer officers and radio operators**".

- the term "officer" defined in regulation I/1.1.4 (Definitions) included all officers, i.e.:
 - officer in charge of a navigational watch.
 - engineer officer.
 - chief engineer officer; and
 - second engineer officer

3. Development of a safety regulatory framework to support the reduction of GHG emissions from ships using new technologies and alternative fuels:

- The table of new technologies and alternative fuels has been further developed and assessed by the working group on GHG safety, giving a special consideration of their risks and hazards, such as corrosiveness and toxicity. An identification and recording of safety obstacles and gaps in the current IMO instruments that may impede the use of the safety alternative fuels or new technologies has been made.
- The MSC Committee endorsed the HTW Sub-Committee's agreement to develop training provisions for seafarers on ships using these alternative fuels.
- The MSC Committee approved the report from MSC WG 2 on “Development of a safety regulatory framework to support the reduction of GHG emissions from ships using new technologies and alternative fuels”, as content :
 - Close the safety GAP between IMO and other relevant instruments.
 - Alternative fuels and new technologies will add more complexities to the onboard ship systems.
 - Personnel should be aware of the challenges, risks, and complexities that these new and emerging technologies and fuels present in normal and Emergency situations.
 - further consideration should be given to the Human element, ship-specific training and Familiarization should be imposed to ensure a safe operation.
- Document MSC 108/5/3 by Singapore, presenting their experience on the use of methanol and ammonia, as alternative marine fuels, in their Port was considered by the working Group. And the three takeaways proposed in the document were fully discussed. The necessity of modelling plume dispersions for emergency response planning, given the flammable and toxic nature of alternative fuels, might be considered by the Committee. The value of such models that contribute to enhancing safety of both ship and shore-side personnel should not be underestimated, in particular for ports in close proximity to population centres.
- A correspondence group has been established to further complete the work on this matter, and both Lydia Ferrad and Odd Rune will be part of this group.
- The table below summarizes the list of new technologies and alternative fuels developed by the GHG working group, focusing on their corrosiveness, toxicity, and explosivity. The table indicates that most of these alternative fuels have at least one of these major risks, necessitating the utmost precaution and stringent safety standards. Additionally, specific training for seafarers working on ships using these fuels will be required.

	Alternative fuels/new technologies	Toxicity	Corrosiveness	Explosion
Liquid fuels / Biodiesel	Fatty-acid methyl ester (FAME)	No	Yes	No
	Hydrothermal liquefaction (HTL) fuel			
	Pyrolysis fuel			
	Fischer-Tropsch (FT) diesel			
	Hydrotreated vegetable oil (HVO)			
	Fischer-Tropsch (FT) diesel			
	Methyl/Ethyl alcohol fuels	Yes	Yes	Yes
Liquefied & Compressed Gaseous Fuels	Ammonia (liquid/gas)	Yes (high)	Yes (high)	Yes
	Dimethyl Ether (DME)	Yes	Yes	No
	Ethane	No	No	Yes
	Hydrogen	No	No	Yes
	Methane/Natural Gas	No	No	Yes
	Propane/Butane (LPG)	Yes	Yes	Yes
	Fuel Blends/Mixtures (e.g. hydrogen - natural gas)	Depends on the fuel used		
Power Conversion Systems	Fuel Cell Power Installations	Depends on the fuel used		
	Fuel Reforming	Depends on the fuel used		
	Nuclear Power	No	No	Yes
	Solar Power	No	No	No
	Wind Propulsion	No	No	No
Energy Storage (Storage also addressed within fuel categories)	Lithium-Ion Batteries	Yes	No	Yes
	Supercapacitor energy storage technology	Yes	Yes	Yes
	High-Pressure Composite Cylinders	No	No	Yes
	Metal Hydrides	No	No	Yes
	Liquid Organic Hydrogen Carrier (LOHC)	Depends on the organic compound that is used		
Improved Efficiency	Wind Assisted Power	No	No	No
	Air Lubrication	No	No	No
	Foils / Hydrodynamic Energy Saving Devices	No	No	No
	Low-Friction Antifouling Paints	Yes	No	No
	Hull Form Optimization	No	No	No
	Optimal Routing	No	No	No
	Propeller Optimization and Propulsion Improving Devices	No	No	No
	Advanced Waste Heat Recovery	No	No	Yes
Emissions Control & Reduction	CO2 Abatement	Yes	No	Yes
	Onshore Power Supply / Cold Ironing	No	No	Yes

Table 1: alternative fuels and new technologies , source: MSC 108-WP.8

4. Amendments to the IGC Code:

- Agreement on amendments to permit the use of ammonia cargo as fuel, with entry into force on 1st July 2026.
- A circular for voluntary early application of this requirement is expected in December 2024.

5. Amendments to IGF code :

- Adopted IGF Code amendments to the IGF Code for ships using natural gas as fuel, with entry into force 1st January 2026
- Approved interim guidelines for the use of LPG cargo as fuel.
- The definition of low flashpoint fuel under SOLAS II-1 Regulation 2 Definitions 29 “Low-flashpoint fuel means gaseous or liquid fuel having a flashpoint lower than otherwise permitted under regulation II-2/4.2.1.1.” and applicability of IGF code were discussed, and further work will follow in the future.

6. Adoption of amendments to mandatory instruments:

- **SOLAS Chapter II-1:** Emergency towing arrangements on non-tanker ships.
- **SOLAS Chapters II-2:** Fire protection amendments
- **SOLAS Chapters V:** reporting of lost containers.
- **LSA Code:** New standards for lifejackets, survival craft hook systems, and revised lowering speeds.
- **Chapters 7 and 9 of the FSS Code:** Specifications for fixed water-based fire-extinguishing systems on ro-ro passenger ships and applicable test standards for heat detectors.
- **IMDG code:** Consequential amendments to the “Revised emergency response procedures for ships carrying dangerous goods.

These amendments are expected to enter into force on 1 January 2026

7. Maritime Autonomous Surface Ships (MASS) Code

- Agreed on a structure of the draft code that aligns the parts that apply to all ships with the parts that only apply if the ship has automated or remote control of the relevant functionality.
- Considered how flag administrations may approve a Remote-Control Centre (ROC).
- Considered measures for the compatibility of a specific MASS and an ROC, based on the principles of the ISM Code.
- Generally agreed that the master should remain on board if there are other persons on board.

The agreement of the voluntary Maritime Autonomous Surface Ships Code is now expected to be later than anticipated, with the mandatory Code adoption also being delayed.

ITF Delegation Focus

The ITF delegation emphasized the importance of measures to strengthen maritime safety including seafarers training and ensure a just and equitable transition for all, leaving no one

behind. The safety of human remains the top priority for the International Transport Workers' Federation.