

ANNEX

WORLD MARITIME DAY THEME FOR 2024 NAVIGATING THE FUTURE: SAFETY FIRST!

Background paper

INTRODUCTION

Safety has been at the heart of IMO activities since the Organization was established in 1958. It has always been recognized that the best way of improving safety at sea is through effective international regulations that are followed by all shipping nations globally. IMO provides the mechanism through which the Governments of countries with an interest in shipping can come together to decide on standards that are to be applied on ships engaged in international voyages. Generally regarded as the most important of all international treaties concerning the safety of merchant ships is the International Convention for the Safety of Life at Sea, better known by its acronym SOLAS, in its successive forms, starting with the first version adopted in 1914 following the **Titanic** disaster of 1912.

Improvements in regulations have sometimes been achieved as a result of shipping disasters that have revealed shortcomings in the system. However, this should not obscure the fact that, in the majority of cases, it is a new technical development, a response to changing circumstances within the industry, or the anticipation of something that may happen in the future that provides the catalyst for the Organization's work on maritime safety. Some pertinent recent examples (by no means an exhaustive list) are making electronic charts mandatory; developing safety requirements for ships operating in polar waters and for the use of alternative fuels; addressing large passenger ship safety; and regulating maritime autonomous surface ships (MASS). The combined expertise available within the Organization that is brought to bear on any standard, guideline, code of practice or any other matter results in a balanced, sensible and effective regulatory regime that applies to nearly 100% of shipping engaged in international trade. No other organization, either international or regional, can muster this unique capability.

Shipping transports about 80% of global trade and is the least environmentally damaging mode of transport when its productive value is taken into consideration. Nevertheless, IMO is actively engaged in a global approach to make shipping carbon-neutral by further enhancing ships' energy efficiency and reducing greenhouse gas (GHG) emissions, through regulation, while at the same time providing technical cooperation and capacity-building activities to support implementation by Member States. Ultimately, improving the safety of ships and reducing their GHG emissions go hand in hand, and both are critical to achieving a sustainable and efficient maritime industry. The transition that shipping is undergoing to meet the challenge to combat climate change will impact shipping and seafarers in many ways. Safety must come first.

Besides decarbonization, safety matters in digitalization, automation and fishing vessel safety will be of paramount importance in the current decade and those to come. The 2024 theme, "Navigating the future: safety first!" is therefore most timely.

The theme is closely linked to the United Nations (UN) 2030 Agenda for Sustainable Development and the 17 Sustainable Development Goals (SDGs), particularly SDG 7 on ensuring access to affordable, reliable, sustainable and modern energy by facilitating access to clean energy research and technology; SDG 8 on promoting sustained, inclusive and

sustainable economic growth, full and productive employment and decent work for all; SDG 9 on building resilient infrastructure, promoting inclusive and sustainable industrialization and fostering innovation; SDG 13 on taking urgent action to combat climate change and its impacts; and SDG 14 on conserving and sustainably using the oceans, seas and marine resources for sustainable development.

The 2024 World Maritime Day theme provides an opportunity to delve into specific topics and issues relevant to enhancing safety at sea. Below is a non-exhaustive list of topics – some interlinked – deserving of greater consideration throughout this year and beyond.

Regulatory framework for the safe reduction of GHG emissions from ships

The adoption of the *2023 IMO Strategy on Reduction of GHG Emissions from Ships* by the Marine Environment Protection Committee (MEPC) at its eightieth session in July 2023 was a historical milestone, opening a new chapter towards maritime decarbonization and providing clear direction, a common vision and ambitious targets to reach net-zero GHG emissions from international shipping by or around, i.e. close to, 2050. This requires proactive action from industry. The maritime sector is witnessing the first pilot projects using alternative fuels, adapting existing technologies, or installing new technological solutions. The successful delivery of an ambitious and accelerated GHG reduction policy undoubtedly requires the assessment of associated safety risks to ships, the people operating them and the surrounding infrastructure and personnel; as well as the delivery of the necessary accompanying international safety regulations. The timescale for the reduction of GHG emissions from ships embedded in the Strategy means there is a commensurate urgency to understand related safety risks and to establish an effective assurance arrangement for the safety of the necessary solutions.

The overall aim is to ensure that, with the introduction of measures to reduce GHG emissions from ships, safety and efficiency of shipping are maintained, and potentially improved, so that the flow of seaborne international trade continues to be smooth and efficient.

That is why the Maritime Safety Committee at its 107th session (MSC 107) in June 2023 approved a new output on a comprehensive regulatory assessment to deliver a regulatory framework for the safe reduction of GHG emissions from ships. Among the important considerations were the following: to be fuel/technology neutral, meaning that IMO must not choose/push a solution; that the scope should identify alternative fuels and new technologies, but that the process would be iterative as new alternative fuels and technologies are identified and as lessons learned are brought back to the Organization; the importance of coordination among all IMO bodies, in particular with MEPC; and the need to transition to new technologies and the use of alternative low and zero-carbon fuels in a safe and orderly manner.

Alternative fuels

IMO plays a vital role in the development of technical provisions for the use of alternative fuels and related technologies, ensuring that safety implications and potential risks associated with their use are properly addressed. There is an urgent need for the maritime industry to be able to utilize alternative fuels to reduce GHG emissions and combat climate change; and the speedy development of the associated international regulatory framework is imperative.

New technologies, digitalization and automation

New technologies, digitalization and automation have already led to profound changes in ship design and construction, navigation, ship handling, cargo handling, berthing, mooring, communications and many other related processes. For example, new technologies in the

shipping industry have enhanced efficiency, speed and accuracy in various operations, while automation has facilitated the use of robotics and artificial intelligence to enhance safety and speed, increase the capacity of cargo handling and reduce the risk of accidents. Ultimately, new technologies, digitalization and automation are continuing to shape the future efficiency and competitiveness of the shipping industry, resulting in improved overall customer satisfaction. IMO will continue its work to address the necessary regulatory challenges to facilitate this process and ensure the safety of navigation worldwide.

Goal-based regulation

After a long history of developing prescriptive regulations, the introduction of new technologies, digitalization and automation has rendered many of these regulations outdated and in need of urgent review. To accommodate the fast-changing trends in technology and to provide flexibility for ship designers and equipment manufacturers, the Organization has embraced the concept of goal-based regulations. This means setting broad overarching safety, environmental and security standards that ships are required to meet during their lifecycle – while allowing for appropriate methods (including novel and innovative approaches) to reach those standards. Some recent examples are the International Code for Ships Operating in Polar Waters (Polar Code), the International Code of Safety for Ships carrying Industrial Personnel (IP Code) and the ongoing development of a goal-based Code to regulate MASS. The utilization of the goal-based approach to new regulations to safely navigate the future will continue.

Maritime Autonomous Surface Ships (MASS)

The advancement in MASS design and construction has developed rapidly, resulting in significant regulatory challenges for future deployment of autonomous vessels. Challenges include the reliability of data transfer communications; cyber security; training requirements for MASS personnel; technical performance criteria for remote operations centres; the need for flag, port and coastal State oversight; and liability and compensation, among many others. The Organization has adopted a holistic approach, involving the MSC, Legal (LEG) and Facilitation (FAL) Committees, in regulating autonomous ships. As part of this coordinated approach, MSC has embarked on the development of a goal-based non-mandatory MASS Code, expected to take effect on 1 January 2025, making 2024 a critical year for the completion of the work. The new Code will provide regulatory certainty for a young and growing industry while, at the same time, ensuring that MASS are at least as safe as conventional ships. With the experience gained in applying the non-mandatory Code, paired with new emerging concepts and technology, the Organization will be working towards a mandatory Code, currently planned to enter into force on 1 January 2028.

IMO Member State Audit Scheme (IMSAS)

IMSAS was developed to determine to what extent Member States are implementing and enforcing applicable IMO instruments and became mandatory in January 2016. Up to 25 audits of Member States are carried out per year in accordance with the overall audit schedule. All Member States are required to undergo a mandatory audit within a seven-year cycle established under the Scheme and, to date, 114 mandatory audits have been carried out under the first audit cycle which is expected to be completed in 2025. A Council Joint Working Group on the Member State Audit Scheme will consider in detail modalities for the further development of the Scheme into the second audit cycle, based on the potential introduction of a continuous monitoring approach and prioritization of audits, and to revise relevant documentation for the Scheme accordingly.

Cybersecurity

The increasing digitalization and automation of the international shipping and port sectors brings inherent cybersecurity vulnerabilities and risks. MSC 107 agreed to revise the *Guidelines on maritime cyber risk management* (MSC-FAL.1/Circ.3/Rev.2), in cooperation with the FAL Committee, and identify the next steps to enhance maritime cybersecurity. In addition, in 2024, the Organization is planning to organize, facilitate and promote international events that serve as a platform for knowledge and information exchange on maritime cybersecurity between States, international organizations and industry; and will develop specialized training packages to strengthen Member States' capabilities in this regard. This will include partnerships with other UN agencies, industry and academia, to ensure cutting-edge training that remains abreast of technological developments; as well as regular monitoring of cybersecurity vulnerabilities, threats, major incidents and best practices that are becoming significant global issues.

Facilitation and digitalization of maritime traffic

Fostering a culture of collaboration and data sharing among port and maritime stakeholders while ensuring the security and protection of both personal and trade-related data is important for the facilitation of maritime traffic. Key initiatives in this regard include the mandatory implementation of maritime single windows (MSWs) for the electronic exchange of information, required of ships in ports worldwide from 1 January 2024; the full digitalization of the port call process beyond the regulatory clearance process, to make it more efficient than ever before and supporting shipping decarbonization efforts and optimal infrastructure use; and the further development of the IMO Compendium on Facilitation and Electronic Business which supports the electronic exchange of information and the "Just-In-Time" arrival concept.

Lessons learned from the COVID-19 pandemic

The COVID-19 pandemic severely endangered the functioning of global supply chains and created a significant humanitarian crisis for seafarers and other marine personnel. IMO ensured that the FAL Convention was updated as a result of the lessons learned. The new provisions focus on enabling ships and ports to remain fully operational during a public health emergency of international concern (PHEIC), in order to ensure complete functionality of global supply chains to the greatest extent possible. The envisaged consideration and adoption, at the thirty-third regular session of the Assembly, of recommendations emanating from the *UN Joint Action Group to review the impact of the pandemic on the world's transport workers and the global supply chain* will emphasize the importance of protecting the well-being of seafarers and strengthening global cooperation to address unforeseen challenges through enhanced health and safety measures for seafarers, accelerated adoption of digital technologies, and collaboration and coordination between different stakeholders in the maritime industry.

Just and fair transition

The development of new technologies, the use of alternative fuels, digitalization and automation must be managed effectively to ensure the safety and health of the maritime workforce and the protection of livelihoods. Significant retraining and upskilling are required to harness the opportunities offered by these fast-paced developments. IMO has been at the forefront of ongoing actions to prepare seafarers for future developments, including comprehensively reviewing the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW) Convention and Code; working with various stakeholders on a Baseline Training Framework for Seafarers on Decarbonization; establishing technical cooperation partnerships on training with seafarer-supplying countries; and many other work streams, to help attract and retain seafarers and prepare them for the challenges of a long-term future in a dynamic and exciting maritime industry.

Maritime security

The inter-connected modern maritime domain faces new and emerging security threats on an unprecedented scale. To address these challenges to the safety and security of international shipping, the Organization is delivering a major upgrade to the training and capacity development offered under IMO's Global Enhancement of Maritime Security programme, which supports countries in enhancing security measures to protect ships and ports from threats posed by terrorism and other illicit acts, including piracy and armed robbery; smuggling of arms, explosives and drugs; and cyberattacks. Building on the success of previous technical cooperation programmes, 2024 will see the introduction of new training activities, including the latest good practice in Maritime Domain Awareness, Passenger and Baggage Screening and the provision of security equipment, to underpin the safe and secure growth and prosperity of international shipping and seaborne trade. IMO will also strengthen its strategic partnerships with international and regional organizations and entities, fulfilling its role as a key implementing partner in a variety of international projects, with renewed emphasis on the delivery of joint regional and sub-regional capacity development activities to maximize available resources and to ensure the widest possible impact of global maritime security capacity development activities.

Safety of fishing vessels and fishing vessel personnel

The safety of fishers and fishing vessels forms an integral part of IMO's mandate. But despite the alarmingly high number of incidents and casualties involving fishing vessels, the latest treaty which governs their safety, the 2012 Cape Town Agreement, has not yet entered into force. As of October 2023, the criterion for the minimum number of parties has been met with 22 Member States; however, the necessary aggregated number of fishing vessels of those parties, i.e. 3,600, has not yet been reached. The Organization is continuing to promote accession to the Agreement to reach the criteria for entry into force and will intensify its efforts under the 2024 World Maritime Day theme, so that the safety of fishing vessels is finally regulated internationally, just as the safety of merchant ships is regulated through the SOLAS Convention and its associated Codes. A key matter that MSC 108 will consider in 2024 is the adoption of the revised International Convention on Standards of Training, Certification and Watchkeeping for Fishing Vessel Personnel (STCW-F Convention) and the new associated STCW-F Code, completed after more than eight years of intense work, taking into account the unique nature of the fishing industry.

In April 1999, the United Nations Commission on Sustainable Development highlighted the issues of flag and port State responsibilities and the need for the Food and Agriculture Organization (FAO) and IMO to cooperate in addressing problems relating to illegal, unlawful and unreported (IUU) fishing. Cooperative work is being undertaken together with the International Labour Organization (ILO) through a Joint FAO/IMO/ILO ad hoc Working Group on IUU fishing and related matters, within the context of each organization's mandate, and the fifth session will be held in Geneva in the beginning of 2024.

Unsafe mixed migration by sea

IMO has been calling for greater focus to be placed on addressing unsafe mixed migration by sea to prevent the loss of lives in accidents caused by large numbers of people setting out to cross the seas in overcrowded and unseaworthy vessels. Cooperation and coordination with sister UN agencies such as the United Nations Refugee Agency (UNHCR) and the International Organization for Migration (IOM) to address the maritime aspects of this humanitarian crisis will continue.

CONCLUSION

Enhancing maritime safety by ensuring that each link in the chain of responsibility fully meets its obligations is a priority for the global maritime community and critical for future global economic growth and prosperity.

The **Titanic** disaster of 1912 was the catalyst that eventually led shipping into a new era of maritime safety. The maritime community is now at another critical juncture, where a nexus of technological developments, altered public expectations, changing priorities, and new risks and opportunities means that another quantum leap is upon us, with an expectation to deliver safe, secure and environmentally sustainable international shipping into the future. IMO has been instrumental in improving maritime safety since the **Titanic**. Through the collective expertise and partnership of the Organization and its Member States, as well as intergovernmental and non-governmental organizations and industry, the Organization has the vision, capability and ambition to deliver the next stage in the evolution of maritime safety.
