CONTRIBUTION OF THE INTERNATIONAL MARITIME ORGANIZATION TO THE UN SECRETARY-GENERAL'S REPORT ON OCEANS AND THE LAW OF THE SEA
(UNGA resolution 79/144)

PRELIMINARY CONSIDERATIONS

Pursuant to the request made by the Under-Secretary-General for Legal Affairs and the United Nations Legal Counsel, in a letter dated 19 March 2025, this contribution focuses on main developments on ocean issues and the law of the sea within the areas of competence of IMO between September 2024 to August 2025.

In particular, this report highlights the Organization's implementation of General Assembly Resolution 79/144 on Oceans and the Law of the Sea, with the relevant paragraphs referred to below.

IMO agrees to having this contribution made available on the website of the Division for Ocean Affairs and the Law of the Sea. This contribution will likewise be made available in the Organization's IMODOCS platform.

MARITIME SAFETY AND SECURITY, FLAG STATE IMPLEMENTATION AND FACILITATION OF INTERNATIONAL MARITIME TRAFFIC

Safety of navigation in the Red Sea and Gulf of Aden

After more than a year in captivity, IMO welcomed the release of the crew of the *MV Galaxy Leader* in January 2025, with special recognition to the Government of the Sultanate of Oman for their assistance. IMO continued to call for the cessation of ongoing attacks on international shipping in the Red Sea area and the Black Sea area that are endangering the safety of navigation of ships and the lives of seafarers.

Maritime Autonomous Surface Ships
(Refer to paragraph 181, A/RES/79/144)

IMO's Maritime Safety Committee (MSC) continued its work on the development of a draft goal-based Code on Maritime Autonomous Surface Ships (MASS), expected to first be adopted as a voluntary instrument, and following an experience-building phase, will provide the basis for the adoption of a mandatory instrument under the SOLAS Convention. The Legal (LEG) and Facilitation (FAL) Committees, which deal with MASS-related issues falling under their purview, have updated their respective road maps in line with the ongoing work on the draft Code. The Marine Environment Protection Committee (MEPC) reiterated its invitation to interested Member States and international organizations to submit concrete proposals to a future session of the Committee on how to best progress the work related to MASS, including potential working arrangements and/or a draft work plan.

Safety of fishing vessels and IUU Fishing
(Refer to paragraphs 108, 111, 113, 125, A/RES/79/144)

In preparation for the prospective entry into force of the Cape Town Agreement[1], which seeks to reinforce fishing vessel safety globally, MSC has completed its work on the *Interim guidance to assist in the implementation of the Cape Town Agreement of 2012*[2]. Comprehensive

[1] 2012 Cape Town Agreement on the Implementation of the provisions of the Torremolinos Protocol of 1993 relating to the Torremolinos International Convention on the Safety of Fishing Vessels, 1977.
[2] IMO resolution MSC.571(109).

outreach activities were also carried out within the context of cooperation with the Food and Agricultural Organization of the UN (FAO) and the International Labour Organization (ILO), including the holding of the fifth Joint FAO/ILO/IMO Ad Hoc Working Group on Illegal, Unreported and Unregulated Fishing and Related Matters (JWG 5) from 8 to 12 January 2024 in Geneva. The Secretariat has also been involved in facilitating the Indian Ocean Memorandum of Understanding on Port State Control - Indian Ocean Tuna Commission (IOMoU– IOTC) pilot project training programme for port State control (PSC) and port State measures (PSM) inspectors of the Indian Ocean region, including the holding of workshops in Cape Town and Kenya.

Protection of vital shipping lanes
(Refer to paragraphs 140 and 150, A/RES/79/144)

The littoral States of the Straits of Malacca and Singapore continued to work collaboratively on the effective functioning of the Cooperative Mechanism on Safety of Navigation and Environmental Protection in the Straits of Malacca and Singapore (the Cooperative Mechanism), under IMO's Protection of Vital Shipping Lanes initiative. The fifteenth Co-operation Forum, and the fifteenth Project Co-ordination Committee meeting were successfully held in Bali, Indonesia, from 21 to 25 October 2024, and the 30th and 31st Aids to Navigation Fund (ANF) Committee meetings on 29 and 30 May, and 6 and 7 November 2024, respectively, in Labuan Bajo and Lombok, Indonesia. The meetings received strong support and contributions from user States, the industry and other organizations to promote navigational safety and environmental protection in the Straits, including the provision and maintenance of critical aids to navigation.

Routeing measures
(Refer to paragraph 148, A/RES/79/144)

The Sub-Committee on Navigation, Communication and Search and Rescue (NCSR) continuously considers the establishment or amendment of existing ships' routeing measures and ship reporting systems, in accordance with SOLAS[3] regulations V/10 and 11, and associated guidelines. MSC 109 adopted, in accordance with the relevant procedure[4], amended traffic separation schemes and associated measures *In the approaches to Hook of Holland and at North Hinder*[5]; a revised recommendation on navigation for containerships in the traffic separation schemes *Off Vlieland, Terschelling-German Bight, Off Friesland and German Bight* western approach[6]; and areas to be avoided around oil rigs off the Brazilian Coast – Santos Basin[7].

Maritime safety information and search and rescue related information
(refer to paragraph 153, A/RES/79/144)

Following the success of the first joint symposium organized in October 2019, a second Symposium on *Extreme Maritime Weather: Bridging the Knowledge Gap Towards Safer Shipping* was jointly organized by IMO and the World Meteorological Organization (WMO) at IMO Headquarters from 23 to 26 September 2024. The Symposium was aimed at finding possible solutions to minimize the risks created by extreme maritime weather events, which pose danger to ships at sea and impact the global blue economy. Greater participation in the WMO Voluntary Observing Ship (VOS) scheme, inter alia, was encouraged to enhance data

[3] International Convention for the Safety of Life at Sea, 1974.
[4] IMO resolution A.858(20), Procedure for the adoption and amendment of traffic separation schemes, routeing measures other than traffic separation schemes, including designation and substitution of archipelagic sea lanes, and ship reporting systems.
[5] IMO circular COLREG.2/Circ.81.
[6] IMO circular SN.1/Circ.344.
[7] *Id*.

gathering and forecasts. Meanwhile, work on enhancing aspects of metocean competencies will continue as part of the comprehensive review of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW).

IMO considered measures to further extend and enhance the broadcasting of maritime safety information, in particular, navigational and meteorological warnings, meteorological forecast and other urgent safety related information, and search and rescue related information to ensure safety of ships and seafarers at sea. In this regard, MSC 109 adopted *Performance standards for the reception of maritime safety information and search and rescue related information by MF and HF digital navigational data (NAVDAT) system*[8] and guidance for the provision of NAVDAT services by coastal States[9].The NAVDAT system offers the prospect of broadcasting comprehensive digital information to ships at higher speeds and with better security compared to the existing analogue system in use (NAVTEXT).

Harmful interference with the Radio Navigation Satellite Service (RNSS)
(Refer to paragraphs 148 and 149, A/RES/79/144)

Noting with grave concern the increasing number of cases of harmful interference in the form of jamming and spoofing affecting the Radio Navigation Satellite Service (RNSS), which is critical for the navigation of civil aircraft, maritime vessels and humanitarian assistance vehicles, as well as for time synchronization of telecommunication networks, the Secretaries-General of the International Telecommunication Union (ITU), International Civil Aviation Organization (ICAO) and IMO issued a joint statement on 18 March 2025 regarding the protection of RNSS from harmful interference and calling on their respective Member States to protect the RNSS and take a series of actions to help addressing the concerns

Technical cooperation to support safety of navigation
(Refer to paragraph 19, A/RES/79/144)

Under the umbrella of the Republic of Korea-funded Sustainable Maritime Transport Cooperation (SMART-C) Projects, the SMART-C Traffic Project aims to support safe navigation in the Philippines with the development of a SMART-Maritime Traffic Management System based on e-Navigation technologies, aiming to contribute to operational safety, efficiency, and environmental sustainability in line with SOLAS and other global standards. In April 2025 an inception workshop was convened in Manila, bringing together relevant agencies[10], the donor country, and IMO experts. An assessment and analysis of the current status of e-Navigation in the Philippines was conducted, with technical site visits for system-level diagnostics and evaluation of operational procedures for maritime safety information.

Piracy and armed robbery against ships
(Refer to paragraphs 118-140, A/RES/79/144)

MSC continued to consider the latest updates on piracy and armed robbery against ships, and noted the issuance by the maritime industry of a new consolidated version of Best Management Practices (BMP) for Maritime Security in March 2025. Member States were encouraged to report incidents in accordance with the *Recommendations to Governments for preventing and suppressing piracy and armed robbery against ships*[11]. In addition to ongoing support for the implementation of the Djibouti Code of Conduct (DCoC) and the Jeddah Amendment (JA), and the Yaoundé Code of Conduct (YCoC), IMO became an implementing

[8] IMO resolution MSC.569(109).
[9] IMO resolution MSC.509(105)/Rev.1, annex 5.
[10] Maritime Industry Authority (MARINA), Philippine Coast Guard (PCG), National Mapping and Resource Information Authority (NAMRIA), Philippine Atmospheric Geophysical and Astronomical Services Administration (PAGASA).
[11] IMO circular MSC.1/Circ.1333/Rev.1.

partner of the three-year European Union-funded (2025-2027) project "Safe Seas for Africa", which aims to enhance maritime security and safety in Africa, particularly in the Gulf of Guinea and the Western Indian Ocean, by addressing the root causes of insecurity at sea and strengthening regional cooperation.

Measures to address maritime security
(Refer to paragraphs 137-139, 140, 149, A/RES/79/144)

The MSC and FAL Committees approved revised Guidelines on maritime cyber risk management[12] which provide high-level recommendations to safeguard ships from current and emerging cyberthreats and vulnerabilities, and agreed on the need to further develop cybersecurity standards for ships and port facilities. IMO continued to implement activities and expanded the range of training available under its Enhancement of Global Maritime Security programme. As an implementing partner under the EU-funded Port Security and Safety of Navigation in Eastern and Southern Africa and the Indian Ocean and the Regional programme for Maritime Security in the Red Sea Area projects, IMO also continued to implement a range of activities to enhance ship and port security under these projects.

In support of the UN Global Counter-Terrorism Coordination Compact, IMO delivered expert briefings to working groups; delivered the maritime and port security elements of the comprehensive visits of the UN Counter-Terrorism Committee, conducted on the Committee's behalf by the Counter-Terrorism Committee Executive Directorate (CTED); and participated in UN Office of Counter-Terrorism (UNOCT) workshops on countering terrorist threats against vulnerable targets and on hydrocarbon and maritime security.

Desiring to tackle maritime security threats from a comprehensive legal perspective, the Legal Committee also approved the addition to its work programme of a new output on measures to address maritime security threats.

Stowaways
(Refer to paragraphs 168, A/RES/79/144)

Following the adoption of the 2022 amendments to the Convention on Facilitation of International Maritime Traffic, 1965[13] (FAL Convention) which included amendments to section 4 on Stowaways, the MSC and FAL Committees are preparing amendments to the *Revised Guidelines on the Prevention of Access by Stowaways and the Allocation of Responsibilities to Seek the Successful Resolution of Stowaway Cases*[14], based on the outcome and recommendations of the seminars organized by IMO in Africa in 2014 and 2018 to reduce the number of incidents involving stowaways, with a target completion year of 2027.

Passenger ship safety
(Refer to paragraphs 151, 180, A/RES/79/144)

Launched in May 2025, IMO's SCOPE (EU-ASEAN Sustainable Connectivity Package) Ship Safety project is dedicated to enhancing the safety of domestic ferry transportation in Indonesia, Malaysia, Thailand, and the broader ASEAN region. The project's overarching aim is to improve safety, sustainability, and connectivity in the domestic ferry sector by addressing key areas such as regulatory frameworks, technical solutions, and stakeholder capacity-building. The specific objective of the initiative is to strengthen knowledge and capacities for passenger ship safety within the target countries and, more broadly, across the ASEAN region.

[12] IMO circular MSC-FAL.1/Circ.3/Rev.3.
[13] IMO resolution FAL.14(46).
[14] IMO resolution FAL.13(42).

Fraudulent registration and fraudulent registries of ships
(Refer to paragraph 116, 123, 174-176, A/RES/79/144)

The Legal Committee approved the undertaking of work at its next session on the development of guidelines or best practices on ship registration, as well as on the conduct of a regulatory scoping exercise to review IMO conventions and other tools available to Member States, with the aim of developing actions to prevent unlawful operations, including substandard shipping. Meanwhile, MSC adopted *Performance standards for a universal shipborne automatic identification system (AIS)*[15], with a view to improving the security and integrity aspects of AIS and to prevent the tempering of AIS transponders.

Promoting a culture of safety through the certification and training of seafarers
(Refer to paragraphs 107, 111 and 179, A/RES/79/144)

Following the adoption by MSC 108 of amendments to the annex to the 1995 International Convention on Standards of Training, Certification and Watchkeeping for Fishing Vessel Personnel[16] (1995 STCW-F Convention), along with the new Standards of Training, Certification and Watchkeeping for Fishing Vessel Personnel (STCW-F) Code[17], IMO has been working closely with its Member States to address the evolving needs of the fishing industry, including through the introduction of harmonized qualification standards and a minimum level of competence for personnel working on fishing vessels covered by the Convention. These efforts will also contribute to the free mobility of fishing vessel personnel and the recognition of certificates between countries that have ratified and implemented the STCW-F Convention. Further, several STCW-F related model courses are currently being updated, and capacity-building activities will be delivered in various regions.

A comprehensive review of the STCW Convention and Code is also currently ongoing before the MSC and the Sub-Committee on Human Element, Training and Watchkeeping (HTW), with Phase 1 (review/identification of gaps) already completed. Furthermore, HTW 11 (10-11 February 2025) agreed on a set of generic interim guidelines for the training of seafarers working on ships powered by alternative fuels and new technologies, while several fuel-specific training guidelines are also under development. MSC considered the results of a study on the effectiveness and effective implementation of the International Safety Management (ISM) Code intended to support any regulatory action to be taken by the MSC thereon.

Fair treatment of seafarers
(Refer to paragraphs 108, 109, 114, 125, A/RES/79/144)

Following joint work between IMO and ILO, the Legal Committee adopted new *Guidelines on fair treatment of seafarers detained in connection with alleged crimes*[18] aiming to safeguard the due process rights of seafarers detained in foreign jurisdictions in connection with alleged crimes committed at sea. The guidelines also seek to ensure that seafarers' wages, medical care and repatriation rights remain guaranteed while any legal proceedings are pending. They also aim to improve coordination among countries, including port States, flag States, coastal States, and the States of which the seafarer is a national, as well as shipowners and the seafarers themselves. A Task Force established under the auspices of the Committee is engaged in ongoing work to review and update the ILO/IMO Joint Database on Abandonment of Seafarers, which is essential to monitoring shipowners' compliance with their obligation to repatriate crew, pay wages, or provide basic necessities.

[15] IMO resolution MSC.570(109).
[16] IMO resolution MSC.561(108).
[17] IMO resolution MSC.562(108).
[18] IMO resolution LEG.7(112) on *Guidelines on Fair Treatment*

The Facilitation Committee approved amendments to Recommended Practice 6.24 in the Annex to the FAL Convention, regarding vaccination and medical care for seafarers during international public health emergencies.[19] These amendments provide that Governments should consider IMO recommendations on crew vaccination within national vaccination programmes, and on access to medical care during a public health emergency of international concern. The Committee also agreed to maintain Standard 6.22 in the Annex to the FAL Convention, designating ship crews and port workers as "key workers" (or equivalent) providing an essential service. The FAL Committee further agreed to consider at the establishment of a joint ICAO/ILO/IMO/WHO working group to discuss the protection of key workers, in relation to the FAL Convention and the Maritime Labour Convention. This effort could contribute to ensuring that seafarers and other marine personnel designated as key workers receive practical benefits and fair treatment.

Implementation of IMO instruments and Member State audits
(Refer to paragraphs 174, 178, 184, A/RES/79/144)

Since becoming mandatory in 2016, audits under the IMO Member State Audit Scheme (IMSAS) have contributed to promoting the consistent and effective implementation of mandatory IMO instruments. Conducted in accordance with relevant IMO Assembly resolutions[20], the Scheme remains a key mechanism to support uniform application across Member States. The first audit cycle is expected to be completed by the end of 2025. In parallel, work is advancing on the development of the Scheme into an IMSAS continuous monitoring mechanism (ICMM) for the second audit cycle, with a view to enhancing transparency and sustaining implementation efforts. In support of this process, the Secretariat continues to analyse audit outcomes and has initiated the publication of consolidated audit summary reports (CASRs), which identify common areas for improvement. These reports are being used to inform the planning and delivery of technical assistance to Member States under the Integrated Technical Cooperation Programme (ITCP), ensuring that capacity-building activities are targeted, impactful, and aligned with audit findings.

Relevant activities on the harmonization of port State control (PSC) procedures and activities worldwide were carried out through the III Sub-Committee, as well as the follow-up work of the Eighth Workshop for Port State Control MoU/Agreement Secretaries, Database Managers and Chairpersons (PSCWS 8). These include efforts related to strengthened cooperation among PSC regimes, updated data transfer model agreement between PSC regimes and IMO, technical cooperation activities and capacity-building for developing PSC, initiation of inspection of fishing vessels, an overarching PSC database together with the associated webservices, and findings from and reporting by the Maritime Anti-Corruption Network.

Technical cooperation to support the implementation of IMO instruments

As a major project dedicated to the implementation of IMO instruments and follow-up to Member State audits, the SMART-C Leaders project has achieved tangible progress in Tonga and Vanuatu. Based on the gap analysis in the implementation of corrective action plans, detailed roadmaps and action plans have been developed to support and address the corrective actions. In parallel, the project has been supporting the development of an online platform to provide real-time updates on IMO conventions. It has also strengthened institutional and human resource capacities through the development of professional training programmes. Lessons learned on implementation of IMO instruments is being shared further to benefit more Pacific SIDS through regional activities and knowledge-sharing platforms.

[19] IMO document FAL 49/22/Add.1, annex 2.
[20] IMO resolutions A.1067(28) and A.1070(28).

Facilitation of maritime trade
(Refer to paragraphs 109, 183, A/RES/79/144)

The FAL Committee approved a work plan for the development of a comprehensive IMO Strategy on Maritime Digitalization, aimed at harnessing emerging technologies to enhance efficiency, safety and sustainability in the shipping industry. This cross-cutting strategy will span different areas of IMO's work and is expected to be adopted by the IMO Assembly in 2027.

The FAL Committee approved a revised version of the *Guidelines for Setting Up a Maritime Single Window*[21] , incorporating amendments to enhance verification functions in maritime single window (MSW) systems and reduce administrative burdens. The amendments include functions to verify information in MSWs, further easing administrative burdens. The FAL Committee also approved a new version of the IMO Compendium on Facilitation and Electronic Business. The Compendium is a reference model that ensures maritime data is standardized, consistently formatted and understood across shipping IT systems, facilitating smooth operations, optimizing port calls and supporting MSWs.

The FAL and LEG Committees approved the joint FAL-LEG-MEPC-MSC circular on guidelines for the use of electronic certificates. The Guidelines provide guidance and information on the use of any kind of electronic certificates issued for the purpose of documenting compliance with IMO requirements, including electronic certificates of seafarers. MSC and MEPC are expected to concurrently approve these guidelines in the forthcoming periods.

World Maritime Day
(Refer to paragraph 155, A/RES/79/144)

In conjunction with the 50-year anniversary of the adoption of the landmark International Convention for the Safety of Life at Sea (SOLAS), IMO celebrated the 2024 World Maritime Day on 26 September 2024 with the theme "Navigating the Future: Safety First!". The Secretary-General, in highlighting the SOLAS Convention's role in setting international safety standards for ship construction, equipment and operation, called for the continued development and implementation of the regulatory regime for maritime safety and collective effort to keep pace with ongoing transformations in international shipping. IMO's World Maritime Day theme for 2025 is "Our Ocean, Our Obligation, Our Opportunity", which will be capped off by the World Maritime Day celebration on 25 September 2025.

[21] IMO circular FAL.5/Circ.42/Rev.4.

PROTECTION OF THE MARINE ENVIRONMENT

Reduction of greenhouse gas (GHG) emissions from ships

(Refer to paragraphs 232-234, 288, A/RES/79/144)

Following the adoption of a revised GHG Strategy in 2023 (2023 IMO GHG Strategy), MEPC made steady progress with the development of mid-term measures to reduce GHG emissions from international shipping, in line with the ambitions set out in the Strategy, with a view to adoption of the measures in October 2025 during an extraordinary session of MEPC[22]. MEPC 83 (7-11 April 2025) finalized and approved draft legal text for an "IMO Net-Zero Framework", expected to be adopted as a new chapter of Annex VI to the International Convention for the Prevention of Pollution from Ships (MARPOL). The mid-term measures set out in the IMO Net-Zero Framework include a technical element (i.e., a goal-based marine fuel standard) and an economic element (i.e., a pricing mechanism for GHG emissions in the maritime sector). The major features of the measures are illustrated below.

- GHG Fuel Intensity (GFI) reduction factors will be set annually and will be based on a two-tier compliance approach: a direct compliance target and a base target. Ships emitting above the set thresholds will balance their compliance deficit by acquiring remedial units through pricing contributions to an IMO Net-Zero Fund; while for emissions above the base target thresholds the deficit can also be balanced by using surplus units banked from previous reporting periods or surplus units transferred from other ships.

- An IMO GFI Registry will be established and administered by the IMO Secretariat to ensure compliance and facilitate the implementation of the IMO Net-Zero Framework, by recording all actions (banking, cancellations, credit, etc.) and transfers of units in each ship's account in the Registry. For each ship and reporting period, an annual ship account statement will be issued by the Registry, reflecting how the ship complied with the requirements and its potential eligibility to receive rewards for the use of zero or near-zero GHG emission technologies, fuels and/or energy sources (ZNZs).

- An IMO Net-Zero Fund will be established to collect, manage and disburse generated revenues through the acquisition of remedial units. The Fund will operate in accordance with governing provisions to be developed by MEPC. The day-to-day operation of the Fund will be overseen by a Governing Board, appointed by the Committee ensuring a gender and geographically balanced composition and adequate representation of developing countries, in particular SIDS and LDCs.

- The revenue will be used for the disbursement of rewards to ships for the use of ZNZs and, in the context of the implementation of the IMO Net-Zero Framework, to promote a just and equitable transition in Member States by facilitating environmental and climate protection, adaptation and resilience-building within the boundaries of the energy transition in shipping, paying particular attention to the needs of developing countries, in particular LDCs and SIDS.

- The IMO Net-Zero Framework also introduces a framework for the certification of sustainable fuels to certify the ship's attained annual GFI; enhances the assessment of possible impacts of the measures on food security by inviting the Committee to keep the potential impacts of the new chapter on food security under review; and explicitly supports the promotion of technical cooperation and transfer of technology by inviting Administrations to cooperate amongst themselves, as well as with the Organization

[22] MEPC/ES.2.

and other international organizations, in respect of the implementation of the new measures.

GHG-related technical cooperation projects and programmes

IMO's framework for maritime decarbonization is further supported by the following technical cooperation projects and programs.

- The *IMO Future Fuels and Technology (FFT) project*, funded by the Republic of Korea, supports the regulatory discussions on GHG reduction measures from international shipping. To achieve its goal, the FFT Project conducts global studies/research to support IMO Member States' evidence-based decision-making; provides easy and free-of-charge access to the latest information on zero and near-zero marine fuels and technologies through a dedicated online portal; and promotes communication and knowledge sharing to foster cooperation and collaboration among stakeholders to achieve the targets of the 2023 IMO GHG Strategy.

- IMO's flagship decarbonization initiative, the *IMO GreenVoyage2050 Programme* launched its Phase 2 in 2024. Open calls for countries to receive support to develop National Action Plans or undertake Pilot Feasibility Studies to reduce ship GHG emissions were issued to IMO member states. Nine countries (Bangladesh, Egypt, Ghana, India, Indonesia, Mexico, Nigeria, Türkiye, and Viet Nam) have joined the Programme in 2025, building upon the 13 countries supported under Phase 1. Activities have commenced in all new partnering countries, with several events hosted to progress policy development work and international experts engaged with the development and delivery of technical feasibility studies. New partnerships to support the programme have also been concluded, brining additional donor funding and expanding the strategic partnerships of the programme to align activities and enhance global cooperation towards the decarbonization of shipping. Engagement with youth has also come into increasing focus under the programme, with a number of visits to schools and training institutions highlighting the potential career opportunities for young people within the maritime sector and promoting careers option in maritime decarbonization for girls and women.

- The *IMO Global Industry Alliance to Support Low Carbon Shipping (Low Carbon GIA)* has progressed the development of a Wind Propulsion Technology (WPT) guide, which will provide practical guidance for shipowners and operators, by bringing together shipowners, equipment manufacturers and classification societies to share their experience and ensure that the challenges and opportunities presented by WPT are understood and can be addressed by all. The Low Carbon GIA has also provided support for Just-In-Time (JIT) implementation in a selected developing country port, offering technical guidance, stakeholder engagement, and capacity-building activities to facilitate data-driven port call optimization and emissions reductions.

- Over six years, the *Global Maritime Technology Cooperation Centres (MTCC) Network project*, GMN I, established five MTCCs worldwide, enhancing maritime capacity with over 90 workshops and 10 pilot projects. Building on this success, the European Union has committed an additional €10 million for GMN Phase II (2024-2027) to scale up regional efforts focused on energy-efficient solutions for vessels and ports, driving further GHG reductions through technology demonstration pilot projects. The project also supports MTCCs in capacity-building, establishing Regional Industry Alliances (RIA), and advancing maritime decarbonization while aligning with other IMO projects and initiatives.

- The *GHG-SMART (Sustainable Maritime Transport Training) Programme*, supported by IMO and the Republic of Korea, continues to play a crucial role in building global capacity for maritime decarbonization as the only initiative dedicated exclusively to SIDS and LDCs. Through needs-based long-term annual training cycles, professional engagement platforms, in-person training and study visits, academic opportunities and international collaboration, this unique initiative is equipping professionals from SIDS and LDCs with knowledge, resources and skills to lead the decarbonization agenda in the maritime sector. Since 2022, 47 SIDS and LDCs have benefited from the GHG-SMART programme with the GHG-SMART now representing a professional network of nearly 80 professionals trained on the regulatory, policy, technological and financial aspects of maritime decarbonization, including NAPs, port and ship efficiency and climate finance.

Energy efficiency of ships

The short-term GHG reduction measures adopted by MEPC in 2021 which entered into force on 1 January 2023, require existing ships to measure their energy efficiency by calculating their attained Energy Efficiency Existing Ship Index (EEXI) and to continuously improve their annual operational carbon intensity indicator (CII) rating. MEPC 83 adopted new CII reduction factors for 2027 to 2030, resulting in a 21.5% carbon intensity reduction in 2030 compared to 2019; and also approved a Work plan for Phase 2 of the review of the short-term GHG reduction measure (2026 to 2028), including the following work streams: enhancing the Ship Energy Efficiency Management Plan (SEEMP) framework; further developing CII metrics; and considering synergies between the IMO carbon intensity/energy efficiency framework and the IMO Net-Zero Framework. Overall, the analysis of reported fuel consumption data shows that the average carbon intensity of the international shipping fleet has reduced by 31.0% to 36.5% in 2023, compared to 2008.

MEPC 83 also approved a work plan on the development of a regulatory framework for the use of onboard carbon capture and storage (OCCS) systems, which capture carbon produced by a ship before it is emitted into the air. The Committee also adopted new *Guidelines for testbed and onboard measurements of methane (CH4) and/or nitrous oxide (N2O) emissions from marine diesel engines*[23].

Prevention of air pollution from shipping
(Refer to paragraph 232, A/RES/79/144)

In the context of current discussions on the impact of black carbon emissions from international shipping on the Arctic, MEPC 82 adopted two resolutions: *Guidance on best practice on recommendatory goal-based control measures to reduce the impact on the Arctic of Black Carbon emissions from international shipping*[24]; and *Guidelines on recommendatory Black Carbon emission measurement, monitoring and reporting*[25]*.* MEPC 83 also noted the ongoing work on the concept of "polar fuels" (i.e., those fuels that are most suitable for use in the Arctic to minimize environmental impact).

With respect to NOx reduction, the Committee adopted the *2025 Guidelines on Selective Catalytic Reduction (SCR) Systems*[26], pertaining to such active emission control technology systems used to reduce NOx emissions. MEPC 83 also adopted amendments to the NOx Technical Code 2008[27], including on the use of multiple engine operational profiles for a

[23] IMO resolution MEPC.402(83).
[24] IMO resolution MEPC.393(82).
[25] IMO resolution MEPC.394(82).
[26] IMO resolution MEPC.399(83).
[27] IMO resolution MEPC.397(83) and MEPC.398(83).

marine diesel engine. The amendments are intended to allow ships to optimize fuel consumption based on their operational profile, thus improving energy efficiency, while ensuring compliance with NOx emission requirements under MARPOL Annex VI.

MEPC 83 further approved future work on the development of guidelines for the management of ammonia effluent generated by ships using ammonia as fuel.

Designation of Emission Control Areas
(Refer to paragraphs 231-234, A/RES/79/144)

MEPC 82 (October 2024) designated the Canadian Arctic and the Norwegian Sea as new Emission Control Areas (ECAs) for Nitrogen Oxides (NOx), Sulphur Oxides (SOx) and Particulate Matter (PM). ECAs are areas where special mandatory measures to regulate emissions from ships are required to prevent, reduce and control air pollution from NOx, SOx and PM, and their adverse impacts on humans. The Committee also approved a proposal to designate the North-East Atlantic Ocean as an ECA for NOx, SOx and PM.

Designation of Particularly Sensitive Sea Areas
(Refer to paragraphs 231-234, A/RES/79/144)

MEPC 83 (April 2025) designated the Nusa Penida Islands and Gili Matra Islands in the Lombok Strait as a Particularly Sensitive Sea Area (PSSA), following a proposal by Indonesia.[28] These areas fall within the Coral Triangle, a globally recognized marine biodiversity hotspot. The PSSA aims to enhance protections for its unique and endangered species, safeguarding critical habitats and biodiversity, and to accommodate the anticipated growth in shipping traffic traversing the Lombok Strait.

MEPC also agreed in principle to the designation of the Nasca Ridge National Reserve and the Grau Tropical Sea National Reserve as a PSSA, following a proposal by Peru. The Committee invited Peru to further develop the proposed associated protective measures and submit them to MEPC for consideration and approval at MEPC 84 (Spring 2026).

Marine plastic litter from ships
(Refer to paragraphs 12, 215-225, 231, 287 A/RES/79/144)

In line with IMO's commitment to reduce marine plastic litter from all ships, including fishing vessels, MEPC 81 approved *Recommendations for the carriage of plastic pellets by sea in freight containers*[29], addressing the packaging of plastic pellets, and the transport information and onboard stowage of freight containers containing plastic pellets. Subsequently, MEPC 82 approved *Guidelines on good practice relating to clean-up of plastic pellets from ship-source releases*[30], providing practical guidance for government authorities on issues such as contingency planning, response, post-spill monitoring and analysis, and intervention and cost recovery. Most recently MEPC 83 adopted the *2025 Action Plan to Address Marine Plastic Litter from Ships*[31], that will eventually be combined with the Strategy to Address Marine Plastic Litter from Ships[32] when it is next revised.

Technical cooperation projects for the reduction of marine plastic litter

In 2024, IMO's GloLitter project hosted several webinars on national legislation and port waste management, now available on the GloLitter website. This site will be revamped in 2025 as

[28] IMO resolution MEPC.392(82).
[29] IMO circular MEPC.1/Circ.909.
[30] IMO document PPR 11/18/Add.1, annex 11.
[31] IMO resolution MEPC.404(83).
[32] IMO resolution MEPC.341(77).

the OceanLitter website to host all programme projects, including GloLitter, RegLitter and PRO-SEAS. With GloLitter's support, Costa Rica led the drafting of a Central America Regional Action Plan on marine plastic litter. Beneficiary countries in Africa and South America developed twinning proposals for joint regional activities, including train-the-trainer workshops, capacity-building on port waste management, gear marking, delegate exchanges and IMO convention domestication.

In September 2024, the RegLitter project was introduced at the Korea Maritime Week in Busan. In November, the OceanLitter Programme was launched at INC-5.1[33], with a booth engaging 2,000 participants from over 170 countries on marine litter reduction efforts by IMO and FAO. In December 2024, GloLitter conducted national and regional workshops on port waste management and PSC training in Brazil and Jamaica. That same month, GEF approved the US$7.1 million Plastic Reduction in the Oceans: Sustaining and Enhancing Actions on Sea-based Sources (PRO-SEAS) project (2025–2029), led by IMO and FAO, to build on GloLitter's work and support marine litter reduction in Kenya, Costa Rica, Vanuatu and Jamaica.

Invasive aquatic species
(Refer to paragraphs 227, 228, 229 and 230, A/RES/79/144)

MEPC continued its ongoing review of the Ballast Water Management (BWM) Convention, including stocktaking of the progress made and consideration of the way forward with regard to the overall plan for completion of the review. MEPC 82 approved the *2024 Guidance for Administrations on the type approval process for ballast water management systems*[34] and the *2024 Guidance on ballast water record-keeping and reporting*[35]. With regard to ships' biofouling, MEPC 83 approved the initiation of work on the development of a legally binding framework for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species, assigning the work to the PPR Sub-Committee. MEPC 83 also approved the *Guidance on in-water cleaning of ships' biofouling*[36].

Technical cooperation projects to address ships' biofouling

The IMO-executed GEF-UNDP-IMO GloFouling Partnerships project, which ended in May 2025, made a significant contribution to addressing the threat of invasive aquatic species introduced through biofouling on ships. It supported governance, capacity development, innovation, and awareness raising globally, regionally and nationally. At the institutional level, the project helped lay the groundwork for long-term national action by strengthening policy frameworks for biofouling management. Twelve lead beneficiary countries successfully developed national status assessments and biofouling management strategies, while an additional nine partner and non-partner countries prepared national status assessments, reflecting broad engagement and commitment.

IMO also supports the TEST Biofouling project (Accelerating Transfer of Environmentally Sound Technologies through demonstration pilots to reduce biofouling and related emissions), funded by the Norwegian Agency for Development Cooperation (NORAD), which provides hands-on training and pilot projects in Africa, Asia, the Caribbean and the Pacific. Project updates, training resources, and a video library are available on the TEST Biofouling website.

[33] First part of the Fifth Session of the Intergovernmental Negotiating Committee (25 November to 1 December 2024).
[34] IMO circular BWM.2/Circ.43/Rev.2.
[35] IMO circular BWM.2/Circ.80/Rev.1.
[36] IMO circular MEPC.1/Circ.918.

Ship recycling
(Refer to paragraph 236, A/RES/79/144)

In view of the upcoming entry into force of the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships (Hong Kong Convention) on 26 June 2025 and the urgent need to provide guidance on the interplay between the Hong Kong Convention and the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel Convention), MEPC 82 approved the *Provisional guidance on the implementation of the Hong Kong and Basel Conventions with respect to the transboundary movement of ships intended for recycling*[37]. With a view to facilitating technical cooperation, MEPC 83 also approved an output on Assessment of the implementation of the Hong Kong Convention through an experience-building phase, which is expected to commence in 2027 and continue over four years.

SENSREC Project

The SENSREC Project assists developing countries in implementing the Hong Kong Convention. In 2024, aside from capacity building workshops, two conferences were held to encourage investment into the modernization of the ship recycling industry in Bangladesh. National legislation on ship recycling and hazardous waste management was reviewed, resulting in draft amendments to be considered by relevant ministries. In relation to gender mainstreaming, a gender sensitization manual was developed and published with the aim of attracting more women into the Bangladesh ship recycling industry. The publication was launched at a careers fair for women organised in collaboration with Women in International Shipping and Trading Association (WISTA) Bangladesh. In September 2024 the SENSREC Project was launched in Pakistan. This new 2-year project, which is funded by Norway and China, and which will be implemented in collaboration with ILO, has three goals, namely, updating national legislation, providing technical capacity building and supporting industry upgrade.

Dumping of wastes at sea
(Refer to paragraphs 227, 249, 250 and 253, A/RES/79/144)

The London Convention and London Protocol (LC/LP) is an international framework for countries to individually and collectively protect the marine environment from pollution caused by waste dumping and other matter at sea. To further strengthen technical cooperation and capacity building to implement the London Protocol, the SMART-C LC/LP project (2025-2029) aims to implement the London Protocol through education and collaboration,- with a focus on the Caribbean region and Mongolia.

Marine geoengineering
(Refer to paragraph 251, A/RES/79/144)

LC/LP Parties continued their discussions on marine geoengineering techniques and issued a new statement on marine geoengineering, further signalling their determination to ensure that the protection of the marine environment is at the forefront when considering ocean-based climate change mitigation measures. The statement underscores, among others, that each of the four marine geoengineering techniques prioritized for evaluation under the LC/LP framework has the potential for deleterious effects that are widespread, long-lasting or severe; and that there is considerable uncertainty regarding their effects on the marine environment, human health and other uses of the ocean. The governing bodies also agreed to establish a roster of international independent experts which will be established and administered by the

[37] IMO resolution HKSRC.2/Circ.1.

LC/LP Secretariat. The roster is intended to provide Parties with experts capable of advising on assessing marine geoengineering activities.

CO_2 sequestration in sub-seabed geological formations
(Refer to paragraph 212, A/RES/79/144)

In 2025, the governing bodies noted progress with the ratification of the 2009 amendment to article 6 of the London Protocol, concerning the export of wastes for dumping purposes, aimed at enabling Parties to share transboundary sub-seabed geological formations for sequestration projects, as well as with the 2019 resolution[38] to allow provisional application of the amendment to article 6. The meeting also endorsed the LC/LP Scientific Groups' decision to re-establish the Correspondence Group on Experiences with the Carbon Dioxide Streams Assessment Guidelines, to continue to collect information regarding experiences with the consideration or application of the Guidelines, and provide a report in 2025.

Anti-fouling systems on ships

The LC/LP governing bodies and MEPC concurrently approved the *Revised guidance on best management practices for removal of anti-fouling coatings from ships*[39] to reflect the amendments to the AFS Convention to introduce controls on cybutryne and the adoption of the 2023 Biofouling Guidelines. MEPC 83 also adopted amendments[40] to the *2023 Guidelines for the development of the Inventory of Hazardous Materials*[41], clarifying the relevant threshold in respect to cybutryne for samples taken directly from the hull or from wet paint containers.

Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP)
(Refer to paragraph 214, A/RES/79/144)

The Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP), for which IMO provides secretariat services through a dedicated GESAMP Office, held its 51st annual session from 9 to 13 September 2024, hosted by the International Atomic Energy Agency (IAEA) at its Marine Environment Laboratories in Monaco. GESAMP reviewed the progress by its currently active nine working groups and agreed on its future work programme.

Underwater radiated noise
(Refer to paragraphs 280-285, 287, A/RES/79/144)

MEPC 82 approved amendments to the *Revised guidelines for the reduction of underwater radiated noise from shipping to address adverse impacts on marine life* (Revised URN Guidelines)[42] , to include a URN management planning reference chart; and approved an *Action Plan for the reduction of underwater noise from commercial shipping* (URN Action Plan), to be reviewed and revised as necessary. The URN Action Plan aims to address barriers to the uptake of the Revised URN Guidelines in order to further prevent and reduce URN from ships.

GloNoise Partnership

The IMO-UNDP-GEF GloNoise Partnership aims to build a global alliance to support developing countries in raising awareness, strengthening capacity, establishing baselines and

[38] Resolution LP.5(14).
[39] IMO circular AFS.3/Circ.6.
[40] IMO resolution MEPC.405(83).
[41] IMO resolution MEPC.379(80).
[42] IMO circular MEPC.1/Circ.906/Rev.1.

fostering policy dialogue on reducing URN from shipping. This supports the implementation of the Revised URN Guidelines, the URN Action Plan and the ongoing Experience Building Phase (EBP), all aimed at mitigating the impact of shipping noise on marine ecosystems. In 2024, the project achieved key milestones, including a March Inception Workshop, and National Task Forces were formed to boost stakeholder engagement. Country workshops took place in Argentina, Chile, India, Costa Rica, South Africa and Trinidad and Tobago. A major hybrid workshop with the World Maritime University in Malmö drew 250 participants from over 50 countries.

Liability and compensation in case of pollution damage at sea
(Refer to paragraphs 159-162, 227 and 242, A/RES/79/144)

IMO continued to encourage and provide support to Member States in their efforts to accede to and bring into force the 2010 HNS Convention[43]. The Convention aims to ensure adequate, prompt and effective compensation for those affected by incidents involving hazardous and noxious substances (HNS) carried on ships. The Secretariats of IMO and the International Oil Pollution Compensation Funds (IOPC Funds) have been continuously at work in supporting States with their efforts to accede to the Protocol and to prepare for its implementation. Upon its entry into force, the 1996 Convention and 2010 Protocol shall mutatis mutandis constitute and be called the 2010 HNS Convention.

The Legal Committee also approved a new output on identifying the suitability of IMO liability and compensation regimes with respect to alternative fuels in its work program.

[43] Protocol of 2010 to the International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, 1996. Upon the entry into force of the Protocol, the 1996 Convention and 2010 Protocol shall mutatis mutandis constitute and be called the 2010 HNS Convention.

CAPACITY-DEVELOPMENT and REGIONAL COOPERATION

(Refer to paragraphs 32-34, 107, 166, A/RES/79/144)

IMO continues to provide technical assistance to its Member States, particularly developing countries, to assist them in ratification, implementation, enforcement of, and compliance with IMO conventions through *inter alia* building their human and institutional capacities. IMO's technical cooperation work, which operates within a framework of the Integrated Technical Cooperation Programme (ITCP) regional and global programmes, as well as thematic long-term projects, is funded through both the Technical Cooperation (TC) Fund and extra-budgetary resources and enhanced through formal partnership agreements with Member States and various international and regional organizations. The capacity development activities delivered by IMO during the reporting period relating to specific areas of its work in maritime safety and marine environment protection, are reported in the previous sections, as appropriate.

World Maritime University and IMO International Maritime Law Institute

(Refer to paragraphs 32, 33, A/RES/79/144)

Utilizing the capacity of its two global maritime training institutions, the World Maritime University (WMU) located in Malmo, Sweden and the IMO International Maritime Law Institute (IMLI) based in Malta, IMO continued to offer access to high level postgraduate maritime education and training. The great majority of WMU and IMLI students are granted fellowships not only from the IMO but a variety of donors. WMU and IMLI's annual reports for 2024 can be accessed through their respective websites.

Women in Maritime

(Refer to paragraph 110, A/RES/79/144)

Through its ITCP Women in Maritime global programme, which is now in its thirty-seventh year, and under the slogan: "Training-Visibility-Recognition", IMO has continued its efforts to empower women in the maritime community and create an enabling environment for their growth and recognition, both in shore-based and seagoing posts. In line with the Capacity-Building Decade 2021-2030 strategy[44] and the technical cooperation (TC) priorities outlined in IMO's Technical Cooperation Framework, the programme for 2024-2025 provided a vector for promoting the United Nations (UN) 2030 Agenda for Sustainable Development and its Sustainable Development Goal (SDG) 5 to "Achieve gender equality and empower all women and girls". Target 5.5 of SDG 5 to "Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life" was particularly addressed, while giving priority to meeting the special assistance needs of least developed countries (LDCs) and small island developing States (SIDS).

In line with the requirements of the UN system-wide Action Plan (UN-SWAP), in 2023, the Organization began developing gender equality markers (GEM) to be applied to all ITCP and long-term thematic projects. This marking importantly enables a count of how many activities fall under each code, as well as a calculation of the total budget allocated against each code. The work on the development of the IMO GEM was completed in 2024, with the roll out of training to all staff working in technical cooperation activities taking place in October 2024. Starting in 2025, all technical cooperation activities now have a GEM assigned to them. The integration of GEM into IMO's programmatic work seeks to address the significant underinvestment in advancing gender equality within the maritime sector. This underinvestment is disproportionate to the scale of the issues that must be resolved to achieve meaningful progress towards equality – an essential factor for overall advancement in the sector. Additionally, the integration of GEM will lead to improved programming, enabling the

[44] IMO resolution A.1166(32).

delivery of enhanced and transformative results aligned with the *Strategic plan for the Organization for the six-year period 2024 to 2029*[45] and all strategic directions, including strategic direction 6 (SD6) on the Human Element.

In 2024, the IMO Women in Maritime programme also supported two major regional conferences to promote gender equity in the maritime sector. The first, held from 2 to 4 September in São Tomé, brought together women maritime professionals from 34 African countries under the theme "Safety First: Women Joining Hands to Shape the Future of Maritime in Africa". This event, attended by safety and security experts from IMO, UNODC, and INTERPOL, focused on enhancing maritime security, safety, and the role of women in implementing IMO instruments through regional strategies. The second conference, held from 10 to 12 September in Busan, South Korea, gathered representatives from 12 Asian countries under the theme "Tides of Change: Women Leading to a Sustainable and Innovative Maritime Future."

Alongside these initiatives, IMO and WISTA International conducted the second Women in Maritime Survey, which seeks to identify the current state of gender diversity in the maritime sector, including the proportion of women in various roles, from seafarers to managerial and executive positions, and serves as a benchmark for evaluating the effectiveness of initiatives aimed at increasing gender equality over time. By collecting data, the Survey uncovers barriers faced by women in the industry, such as recruitment biases, lack of opportunities for promotion, or insufficient support for work-life balance. On 16 May 2025, IMO hosted a Symposium titled An Ocean of Opportunities for Women to celebrate the 2025 International Day for Women in Maritime, highlighting women's contributions, promoting their recruitment and retention, and reinforcing IMO's commitment to achieving gender equality as part of the UN Sustainable Development Goals.

SMART-C Women Project

The SMART-C Women Project, funded by the Republic of Korea (RoK), supports women professionals from 10 beneficiary countries in the Asian and Pacific regions to strengthen their competencies in environmental and digital technologies. Following the completion of an online training programme earlier in the year, 18 executive and managerial level women from the Asian countries (Indonesia, the Philippines, Sri Lanka, Timor-Leste & Viet Nam) attended the in-person training, held in Busan, RoK, during Korea Maritime Week, September 2024.

As part of the SMART-C Women Fellowship Programme continuing support academic and professional development, two participants of the 2024 training sessions have been awarded fully funded fellowships to pursue a Master's degree at WMU. In March 2025, 19 women maritime professionals from five Pacific beneficiary countries (Fiji, the Marshall Islands, Papua New Guinea, Tonga & Vanuatu) participated in the 2025 online training programme, while 11 of the participants have been selected to attend the in-person training scheduled in Busan for September.

[45] IMO resolution A.1173(33).