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1. Regional Seas

(1) Introduction

During the past year, the International Maritime Organization (IMO)'s Marine Environment Protection Committee (MEPC) held two meetings (seventy-second and seventy-third sessions) in London, United Kingdom. At the seventy-second session, held on 9-13 April, the committee adopted the initial strategy on the reduction of greenhouse gas (GHG) emissions from ships that set out a vision to reduce GHG emissions from international shipping and to phase them out. The strategy envisages a reduction in total GHG emissions from international shipping; the goal is to reduce the total annual emissions by at least 50 percent by 2050 compared to 2008, which is consistent with the Paris Agreement temperature goals. In fact, the initial strategy represents a framework for member states setting out the future vision for international shipping; the levels of ambition to reduce GHG emissions and guiding principles; and includes candidate further short-, mid-, and long-term measures, with possible timelines and their impacts on states. The strategy also identifies barriers and supportive measures including capacity building, technical cooperation, and research and development. According to the roadmap approved by IMO member states in 2016, the initial strategy is due to be revised by 2023.

The MEPC also adopted other relevant international documents like the Code for Approval of Ballast Water Management Systems and amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk, the 2004 International Convention for the Control and Management of Ships' Ballast Water and Sediment, and others.

At its seventy-third meeting, held on 22–6 October, the MEPC approved the program of follow-up actions of the initial strategy on reduction of GHG emissions from ships up to 2023 that is intended to be used as a planning tool in meeting the timelines identified in the strategy. The committee adopted the 2018 Guidelines on the Method of Calculation of the Attained Energy Efficiency Design Index for New Ships, incorporating updates to the 2014 guidelines, and addressed the implementation of the 0.5 percent sulphur limit. It adopted an amendment to the International Convention for the Prevention of Pollution from Ships (MARPOL Convention) to prohibit the carriage of non-compliant fuel oil for combustion purposes for propulsion or operation on board a ship—unless the ship has an exhaust gas cleaning system (scrubber) fitted—and approved the guidance on ship implementation planning as well as the guidance on best practice for fuel oil suppliers. Marine plastic litter was another item on the agenda of the

committee. The MEPC adopted an action plan to address marine plastic litter from ships in order to contribute to global solutions for preventing plastic litter from entering the oceans through ship-based activities. The action plan identifies a number of actions, including a proposed study on marine plastic litter from ships; looking into the availability and adequacy of port reception facilities; consideration of making marking of fishing gear mandatory; promoting the reporting of loss of fishing gear; facilitating the delivery of retrieved fishing gear to shore facilities; reviewing provisions related to the training of fishing vessel personnel and familiarization of seafarers to ensure awareness of the impact of marine plastic litter; and strengthening international cooperation, in particular, with the Food and Agriculture Organization of the UN and UN Environment.

In addition, the MEPC adopted the 2018 Guidelines for the discharge of exhaust gas recirculation bleed-off water; approved (for adoption in 2019) draft amendments to the International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk (IBC Code), including the draft revised chapters 17 (Summary of Minimum Requirements), 18 (List of Products to which the Code does not Apply), 19 (Index of Products Carried in Bulk), and 21 (Criteria for Assigning Carriage Requirements for Products Subject to the IBC Code); approved an MEPC circular on guidelines for the carriage of energy-rich fuels and their blends; approved part IV of the guidelines for the use of dispersants for combating oil pollution at sea, which focuses on the sub-sea application of dispersant; and approved, for subsequent adoption, draft guidelines for the use of electronic record books under the MARPOL Convention, and associated draft amendments to the MARPOL Convention and the Technical Code on Control of Emission of Nitrogen Oxides from Marine Diesel Engines.

(2) Arctic

The Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean (High Seas Fisheries Agreement) was signed on 3 October in Ilulissat, Greenland, by the five Arctic Ocean coastal states: Canada, Denmark (acting on behalf of Greenland and the Faroe Islands), Norway, the Russian Federation, and the United States (the A5) together with China, the European Union (EU), Iceland, Japan, and South Korea (which, together with the A5, form the so-called A5+5). The purpose of the agreement is to prevent unregulated commercial fishing on the high seas in the Central Arctic Ocean through the application of precautionary conservation and management measures as a part of a long-term strategy to safeguard healthy marine ecosystems and to ensure the conservation and sustainable use of fish stocks. The agreement covers fish, molluscs, and crustaceans, except those belonging to sedentary species, which are defined in Article 77 of the UN Convention on the Law of the Sea.

The High Seas Fisheries Agreement is set to establish and operate a Joint Program of Scientific Research and Monitoring to improve the understanding of OCEANS 3

the ecosystems of this area and to determine whether fish stocks might exist in an area that could be harvested on a sustainable basis. Based on the science provided through the Joint Program, the agreement envisions the possibility that one or more additional regional fisheries management organizations or arrangements may be established for this area in the future.

The first meeting in five years of the Arctic Environment Ministers was held on 11–12 October in Rovaniemi, Finland. The two-day meeting brought together ministers and high-level representatives from the eight Arctic Council states, representatives from the six permanent Indigenous organizations, and representatives from observer countries and other organizations of the Arctic Council. The discussions focused on the need to cooperate to develop a network of marine protected areas in collaboration with Indigenous peoples, the need the reduce marine litter and plastic pollution that ends up in the Arctic region. including new emerging contaminants, and the need to strengthen and sustain Arctic monitoring and observations by using best available scientific and indigenous knowledge. Moreover, during the high-level dialogue, concrete solutions to a range of challenges in the Arctic and potential elements for collaboration and action on Arctic environmental cooperation were explored. Information from the recent Intergovernmental Panel on Climate Change special report on 1.5 degrees Celsius global warming and its impact on the Arctic was also highlighted.

Parallel with the Arctic Environment Ministerial Meeting, the second UArctic Congress was held in Rovaniemi, Finland, on 9-12 October. The biodiversityworking group of the Arctic Council's Conservation of Arctic Flora and Fauna organized the Congress in partnership with the Ministry of Environment (Finland) in order to promote the conservation and sustainable use of Arctic biodiversity. The purpose of the Congress was to bring together UArctic meetings and a science conference into one single gathering, including business meetings of the UArctic Institutes Leadership Team. This is in order to contribute to meaningful dialogue between scientists, Indigenous people, policymakers, government officials, industry, students, and civil society. The main themes that were identified as the backbone of the Congress were climate change, ecosystem-based management, mainstreaming biodiversity, addressing stressors, identifying and safeguarding important areas, improving knowledge, and public awareness. They were discussed in three plenary panels: (i) Our Knowledge, Our Actions: Addressing Biodiversity Conservation in a Changing Arctic; (ii) The Arctic in a Global Context: Biodiversity Targets, Sustainable Development Goals and a Post-2020 Agenda; and (iii) Arctic Environment Ministers Panel.

(3) Antarctic

The thirty-seventh Meeting of the Commission on the Conservation of Antarctic Marine Living Resources was held in Hobart, Australia from 22 October to 2 November. The subjects of the meeting were various. Concerning environmental protection, the focus of the meeting was on illegal, unreported, and unregulated fishing in the convention area, new proposals on marine protected areas in the convention area, the management of exploratory fisheries and new fisheries proposals, compliance with conservation measures in force, and cooperation with other international organizations, including within the Antarctic Treaty System.

(4) Baltic Sea

The Ministerial Meeting of the Baltic Marine Environment Protection Commission (HELCOM) was held in Brussels, Belgium, on 6 March. The meeting focused on three issues: (i) taking new action to meet the UN 2030 Sustainable Development Goals (SDGs) in the Baltic Sea; (ii) strengthening implementation of the Baltic Sea Action Plan by 2021; and (iii) adjusting the Baltic Sea Action Plan based on knowledge and future challenges. During the meeting, the contracting parties (Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland, the Russian Federation, Sweden, and the European Union) agreed on new commitments for the Baltic marine environment based on the ocean-related SDGs. These commitments include an update of the Baltic Sea Action Plan (BSAP), intensified efforts to reach the goals of the existing plan, and a regional strategy for nutrient recycling. The BSAP will include new measures that are needed to achieve the existing goals—specifically, a Baltic Sea unaffected by eutrophication, a Baltic Sea with life undisturbed by hazardous substances, maritime activities carried out in an environmentally friendly way, and a favourable conservation status for Baltic Sea biodiversity. Moreover, participants at the meeting also confirmed the commitment to develop a Baltic-wide nutrient recycling strategy by 2020, with the aim to reduce nutrient inputs to the Baltic Sea and to make more efficient use of nutrients.

The regional workshop Preparing for the Second Global Integrated Marine Assessment (World Ocean Assessment II), which is part of the second cycle of the Regular Process for Global Reporting and Assessment of the State of the Marine Environment, a UN global mechanism established in 2002, was held in Valletta, Malta, on 27–8 August. Within the workshop dedicated specifically to the North Atlantic, the Baltic Sea, the Mediterranean Sea, and the Black Sea regions, a HELCOM team presented its expertise on marine management and sea assessment. Specifically, HELCOM presented the findings from its recently concluded Second Holistic Assessment of the Baltic Sea (HOLAS II), which is an in-depth analysis of the ecological state of the Baltic Sea. The results of the analysis are also published in the HELCOM State of the Baltic Sea Report.

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During the UN Biodiversity Conference, held in Sharm El-Sheikh, Egypt on 17–29 November, the nine ecologically unique marine areas of the Baltic Sea were included in the global registry of the UN Convention of Biological Diversity. These nine ecologically or biologically significant marine areas (EBSAs), which cover 23 percent of the Baltic Sea waters, are 'special areas in the ocean that serve important purposes, to support the healthy functioning of oceans and the many services that it provides.' Knowing the position of these areas will facilitate maritime spatial planning, notably in transboundary areas. In addition to protecting the unique biodiversity, the EBSAs in the Baltic Sea can help to establish maritime spatial plans that will be coherent across borders, leading to greater efficiencies for managing activities at sea and improving the state of the sea.

(5) Caspian Sea

On 20 July in Moscow, the Russian Federation signed an Environment Impact Assessment Protocol under the Framework Convention for the Protection of the Marine Environment of the Caspian Sea (Tehran Convention), which is the only environmental treaty signed between the sea's littoral countries in order to protect and preserve the Caspian Sea and its natural resources. The participating states who signed the protocol are the same state parties to the Tehran Convention (Azerbaijan, Iran, Kazakhstan, the Russian Federation, and Turkmenistan). The protocol foresees a set of harmonized practical procedures for assessing the impact that a project will have on the environment in another state. Accordingly, it prescribes that the impacts on human health, fauna, water, and soil are among the factors that should be accounted for when installing oil refineries, building major power plants, or undertaking major deforestation, and the countries that stand to be affected by a project will have the opportunity to comment on plans underway.

Furthermore, a new, upgraded, online platform was launched on 8 November to support joint action under the Tehran Convention. The objective of the revamped Caspian Environment Information Centre is to provide the parties to the Tehran Convention with an online, collaborative, information-sharing tool, making it easier for different stakeholders from the Caspian littoral states to collaborate on environmental issues.

(6) East-Asian Seas

The second Extraordinary Intergovernmental Meeting of the Coordinating Body on the Seas of East Asia (COBSEA) was held on 25–6 April in Bangkok, Thailand. During the meeting, the COBSEA Strategic Directions 2018–22, which were previously discussed at the twenty-third Intergovernmental Meeting of COBSEA in February 2017, were adopted. These strategic directions set out substantive priorities for COBSEA's work as a regional policy

mechanism, focusing on land-based pollution, including marine litter, nutrients, and waste water as well as ecosystem-based coastal and marine planning and management. That is to say, in addressing land-based marine pollution, COBSEA will focus on nutrients, sediment, and waste water as well as marine litter and micro-plastics. This includes a revision of the COBSEA Regional Action Plan on Marine Litter 2008, the only inter-governmental framework adopted for addressing marine litter in the region as well as project development to support implementation of its provisions. Concerning marine and coastal planning and management, COBSEA will emphasize ecosystem-based approaches, including marine protected areas and marine spatial planning, towards the achievement of relevant SDGs and Aichi Biodiversity Targets. Specifically, this will include establishing a network of marine protected areas, increasing the conservation of marine and coastal areas by 10 percent and building capacity.

The first high-level regional meeting by seven Association of Southeast Asian Nations (ASEAN) countries (Cambodia, Indonesia, Malaysia, Myanmar, the Philippines, Thailand, and Vietnam) was held on 25-7 June in Bali, Indonesia, where it launched an ambitious initiative aimed at improving the environmental health of the seas in the region. The initiative, called the Marine Environment Protection for Southeast Asia Seas (MEPSEAS) Project, is a four-year project (2018-22) that will focus on enhancing the countries' capacity to implement a number of high-priority treaties, including the MARPOL Convention, the Anti-Fouling Systems Convention, the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter and the London Protocol, and the Convention for the Control and Management of Ships' Ballast Water and Sediments. The project is being implemented by the IMO with funding from the Norwegian Agency for Development Cooperation. The ASEAN Maritime Transport Working Group, as the highest regional policymaking body dealing with maritime matters in the region, is the advisory body for the MEPSEAS project.

On 8 November, during the twenty-fourth ASEAN Transport Ministers Meeting held in Bangkok, Thailand, the ASEAN member states adopted the ASEAN Regional Oil Spill Contingency Plan. The contingency plan is a result of the signing of the Memorandum of Understanding on an ASEAN Cooperation Mechanism for Joint Oil Spill Preparedness and Response in 2014, which was assisted by the IMO. This plan provides for a mechanism whereby ASEAN member states can request and provide mutual support in response to any oil spills, and it ensures a common understanding and integration between affected and assisting member states in the event of incidents involving oil spills.

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(7) Mediterranean Sea

On 8 May in Nicosia, Cyprus, an Implementation Agreement on the Sub-Regional Marine Oil Pollution Contingency Plan was signed between Cyprus, Greece, and Israel. The objective of the agreement is to provide support, build capacity to respond to oil spills, and share experiences and lessons learned across the Mediterranean region. The agreement was prepared within the framework of the Mediterranean Action Plan—within the Convention for the Protection of the Mediterranean Sea against Pollution (Barcelona Convention) system—with the leadership and support of the Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea.

In June, the government of Spain declared a 1.35 kilometre-long marine corridor located off the Spanish Mediterranean coast as a marine protected area. The marine area is a corridor used by many species of turtles and cetaceans (whales, and dolphins) in the western Mediterranean for migration, and it is an important mechanism for safeguarding ocean life. This represents a key development for the Barcelona Convention, where Spain has exceeded the SDG target of conservation of 10 percent of coastal and marine areas to be reached by 2020. The corridor has been proposed for inclusion in the List of Specially Protected Areas of Mediterranean Importance (SPAMI List) that was created in the framework of the Barcelona Convention to promote cooperation in the management and conservation of natural areas as well as in the protection of threatened specials and their habitats.

(8) Black Sea

The thirty-fourth Regular Meeting of the Commission on the Protection of the Black Sea against Pollution was held on 24–5 October in Istanbul, Turkey. During the meeting, the commission reviewed the work carried out in the 2017–18 fiscal year and the implementation of the work program for 2017–18 and adopted the budget for the following fiscal year. The State of Environment Report was approved and the international cooperation between the Black Sea states (Bulgaria, Georgia, Romania, the Russian Federation, Turkey, and Ukraine) in protecting the Black Sea environment and the implementation of the provisions of the convention and the Strategic Action Plan for the Environmental Protection and Rehabilitation of the Black Sea (2009) were reconfirmed.

(9) Northwest Pacific

The twenty-third Northwest Pacific Region Intergovernmental Meeting of the UN Environment Action Plan for the Protection, Management and Development of the Marine and Coastal Environment of the Northwest Pacific Region was held on 9–11 October in Moscow, Russian Federation. The member states

endorsed a six-year strategy that will harness science-based cooperation for regional progress towards achieving SDG 14: Life Below Water. In that sense, they outlined that pollution from marine litter and oil spills, eutrophication, invasive species, habitat destruction, and climate change are increasingly threatening the Northwest Pacific marine and coastal ecosystems, and they called for a review of the implementation of the twenty-four-year-old Northwest Pacific Action Plan. Furthermore, an innovative project to produce up-to-date information on key species and habitats of transboundary concern in the Northwest Pacific Region that could be used as important indicators of biodiversity change caused by natural and human factors was launched. The project is intended to generate key information for a Regional Action Plan on Marine and Coastal Biodiversity Conservation to be formulated as part of the medium-term strategy.

(10) North-East Atlantic

The annual meeting of the Commission of the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Commission) was held on 29 June in Paris, France. During the meeting, the OSPAR Commission updated the measures requiring countries to prevent and eliminate pollution caused by radioactive discharges from the nuclear sector by applying the best available techniques and the best environmental practice. It was also announced that seventeen new marine protected areas were added to OSPAR's network, bringing the total to 465, covering 6.3 percent of the North-East Atlantic. The commission also agreed to host a ministerial meeting in Portugal in 2020, where they will adopt a new strategy to protect the North-East Atlantic.

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