

MARITIME ENVIRONMENT PROTECTION
COMMITTEE
79th session
Agenda item 15

MEPC 79/15
8 February 2023
Original: ENGLISH

**REPORT OF THE MARINE ENVIRONMENT PROTECTION COMMITTEE
ON ITS SEVENTY-NINTH SESSION**

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1 INTRODUCTION – ADOPTION OF THE AGENDA

1.1 The seventy-ninth session of the Marine Environment Protection Committee was held from 12 to 16 December 2022. Owing to unforeseen circumstances, Mr. H. Saito (Japan), who was elected as the Chair of the Committee for 2022 at its seventy-seventh session, was not available to chair this session. In accordance with rule 19 of the Rules of Procedure of the Marine Environment Protection Committee, Dr. H. Conway (Liberia), who was elected as the Vice-Chair of the Committee for 2022 at its seventy-seventh session, chaired this session.

1.2 The session was attended by 112 Members and 3 Associate Members; 5 representatives from the United Nations Programmes, specialized agencies and other entities; 9 observers from intergovernmental organizations with agreements of cooperation; and 52 observers from non-governmental organizations in consultative status, as listed in document MEPC 79/INF.1.

Use of hybrid meeting capabilities

1.3 The Committee noted that the plenary sessions would be conducted in hybrid mode, i.e. remote participation enabled, taking into account the relevant decisions of C 127 (C 127/D, paragraph 17.3).

1.4 In this regard, the Committee noted that C 127 had:

- .1 agreed to the use of hybrid facilities to complement in-person meetings from September 2022, for a trial period of one year;
- .2 agreed that the Rules of Procedure and the *Interim guidance to facilitate remote sessions of the IMO Council during the COVID-19 pandemic*, as appropriate, should be applied and that only representatives of the Members attending the meeting in person at IMO Headquarters would be allowed to vote; and
- .3 invited other organs of the Organization to follow the above decisions and to report to a future session of the Council on their experience with hybrid meetings.

1.5 In this connection, the Vice-Chair recalled that, as per Article 30 of the IMO Convention, the Committee shall adopt its own rules of procedure and, in line with the decisions of the Council, the Committee had agreed as follows:

- .1 as per the current rules of procedure of the Committee and the *Interim guidance to facilitate remote sessions of the Committees during the COVID-19 pandemic* (MSC-LEG-MEPC-TCC-FAL.1/Circ.1), adopted by the Committee at the ALCOM meeting in September 2020, for this hybrid session, a Member State would be considered "present" for the purposes of rule 28(1) if they were either physically present in the Main Hall or were registered and participating remotely online using the hybrid system; and
- .2 any voting by secret ballot would take place in person only.

1.6 In this context, the delegation of the Cook Islands expressed its concerns regarding the voting limitations of those delegations attending the meeting remotely and urged that efforts be made as a matter of urgency to ensure that those delegations could fully participate in any voting process should it take place.

Opening address of the Secretary-General

1.7 The Secretary-General welcomed participants and delivered his opening address, the full text of which can be downloaded from the IMO website at the following link:

<https://www.imo.org/en/MediaCentre/SecretaryGeneral/Pages/Secretary-GeneralsSpeechesToMeetings.aspx>

Chair's remarks

1.8 The Vice-Chair thanked the Secretary-General for his opening address and stated that his advice and requests would be given every consideration in the deliberations of the Committee.

Adoption of the agenda and related matters

1.9 The Committee adopted the agenda (MEPC 79/1) and agreed to be guided in its work in general by the annotations contained in document MEPC 79/1/1 and by the provisional timetable (MEPC 79/1/1, annex 2, as amended).

Credentials

1.10 The Committee noted that the credentials of 110 delegations attending the session were in due and proper form.

2 DECISIONS OF OTHER BODIES

2.1 The Committee, having noted the decisions and outcomes of LEG 109, MSC 105, FAL 46 (MEPC 79/2) and C 127 (MEPC 79/2/1) with regard to its work, agreed to take action as appropriate, as indicated below.

Ongoing military conflict between the Russian Federation and Ukraine and its effects on international shipping, the marine environment and seafarers

2.2 The Committee recalled that MEPC 78 had considered the outcomes of LEG 109, MSC 105 and FAL 46 concerning the impact of the ongoing armed conflict between the Russian Federation and Ukraine on shipping and seafarers, as recorded in paragraphs 2.8 to 2.10 of the report of MEPC 78 (MEPC 78/17).

2.3 In this regard, the Committee noted that C 127 had noted actions taken by the Secretariat and relevant IMO committees in response to the requests of C/ES.35 related to the ongoing military conflict between the Russian Federation and Ukraine and its impact on international shipping and seafarers. The Committee further noted that:

- .1 C 127 had decided that the proposal in document C 127/4(b)/6 (Ukraine) to amend the IMO Convention should be further examined by C 128; and
- .2 in relation to document C 127/10/1 (Ukraine), C 127 had noted that the suggested amendments to the III Code could be considered at an appropriate time in the future, following the conclusion of the first IMO Member State Audit Scheme (IMSAS) cycle.

2.4 In this context, the Committee was informed of the relevant actions that had been taken by other IMO bodies after C 127, as set out in paragraphs 2.5 to 2.7 below.

2.5 The Committee noted that TC 72 had decided to suspend, in principle, the participation of the Russian Federation in any IMO technical cooperation activity, either as a recipient or as a host until the Technical Cooperation Committee decided otherwise.

2.6 The Committee also noted that MSC 106 had:

- .1 urged the UN Secretary-General and IMO Secretary-General to continue to work on humanitarian efforts to evacuate all stranded ships and seafarers in the conflict area, including efforts to expand the Black Sea Grain Initiative to other types of ships and additional ports;
- .2 thanked the Secretary-General and the Secretariat for the important contribution to the success of the Black Sea Grain Initiative, in particular the key roles played by the Director of the Legal Affairs and External Relations Division and the Special Advisor to the Secretary-General on Maritime Security;
- .3 noted the success to date of the Black Sea Grain Initiative, which had been achieved through an inter-agency "One UN approach" involving relevant UN bodies, other international agencies, NGOs and the Member States concerned;
- .4 emphasized the important contribution that the Black Sea Grain Initiative was making to alleviate the global food supply shortages resulting from the ongoing conflict in Ukraine;
- .5 recalled that the Black Sea Grain Initiative had been recognized by the UN Secretary-General as a landmark agreement to help vulnerable people in every corner of the world; and
- .6 adopted resolution MSC.519(106) on *Member States' obligations in connection with search and rescue services under the SOLAS and SAR Conventions in the context of armed conflicts*.

2.7 The Committee further noted that C 128 had:

- .1 noted the decision of TC 72 to suspend, in principle, the participation of the Russian Federation in any IMO technical cooperation activity either as a recipient or as a host until the Committee decided otherwise;
- .2 noted information provided in documents C 128/17 (Bangladesh et al.) and C 128/INF.5 (Secretariat), as well as an additional update provided by the Secretary-General on matters related to the situation of international shipping and seafarers in the Black Sea and the Sea of Azov, taking into account the ongoing military conflict between the Russian Federation and Ukraine, and the Black Sea Grain Initiative;
- .3 encouraged the Secretary-General to continue to work on humanitarian efforts to evacuate all stranded ships and seafarers in the conflict area, including efforts to expand the Black Sea Grain Initiative to other types of ships and additional ports;

- .4 thanked the Secretary-General and the Secretariat for the important contribution to the success of the Black Sea Grain Initiative, which had been achieved through an inter-agency "One UN approach" involving relevant UN bodies, other international agencies, NGOs and the Member States concerned;
- .5 emphasized the important contribution that the Black Sea Grain Initiative, recognized by the UN Secretary-General as a landmark agreement to help vulnerable people in every corner of the world, was making to alleviate the global food supply shortages resulting from the ongoing conflict in Ukraine; and
- .6 rescinded its decision to accept the Russian Federation's proposal to host the World Maritime Day parallel event in 2024.

2.8 Subsequently, the Committee noted, inter alia, the following views:

- .1 the aggression by the Russian Federation against Ukraine was condemned in the strongest possible terms as a violation of Ukraine's territorial integrity and sovereignty, including its territorial waters, and as a threat to the Ukrainian people;
- .2 the ongoing armed aggression was a breach of international law and of the UN Charter, undermined global security and stability, caused massive loss of life and injury to civilians, and posed a threat to the safety and security of international shipping, seafarers and the marine environment in the Black Sea and the Sea of Azov region;
- .3 solidarity with Ukraine and its people was expressed;
- .4 the Russian Federation should immediately cease its military action and unconditionally withdraw all its military forces and equipment from the entire territory of Ukraine, fully respecting the territorial integrity, sovereignty and independence of Ukraine;
- .5 with regard to the risk of pollution, concerns for the marine environment were expressed, particularly the risks of pollution of maritime areas by oil, chemicals and other harmful substances released as a result of attacks on merchant ships and essential port infrastructure;
- .6 concerns were expressed regarding actions to evade sanctions through ship-to-ship transfers of gas, oil and other natural resources taking place in the region and associated increased risks to the marine environment and safety of navigation;
- .7 the crucial importance of environmental protection in wartime, in accordance with relevant international obligations under international humanitarian law was stressed;
- .8 the Secretary-General, the UN, Türkiye and all other parties involved, including the Joint Coordination Centre, were thanked for the success of the Black Sea Grain Initiative to date, which had made a significant difference in helping to alleviate global food shortages;

- .9 concerns were expressed with regard to ships and seafarers falling outside the scope of the Black Sea Grain Initiative that were still stranded in the conflict area, and calls for their earliest possible evacuation were made; and
- .10 the Committee should continue to monitor the consequences of the Russian Federation's military actions in the Black Sea and the Sea of Azov on the marine environment, informed by associated monitoring by relevant flag and coastal States and States of shipowners' origin.

2.9 The Committee was informed by the Secretariat that, following the receipt of letters from the Governments of both the Russian Federation and Ukraine regarding ensuring the safe passage of ships departing from Ukrainian ports, the Secretariat, specifically the Director of the Legal Affairs and External Relations Division and the Special Advisor to the Secretary-General on Maritime Security, was working on the issue, in cooperation with OCHA and littoral countries, and intended to provide further information to the relevant IMO bodies in due course.

2.10 The full text of statements made by the delegations of Australia, Canada, Croatia, Estonia, Finland, France, Georgia, Germany, Greece, Iceland, Ireland, Italy, Lithuania, Luxembourg, Monaco, Netherlands, Poland, Portugal, Spain, Türkiye, Ukraine, United Kingdom, United States and by the observer from the European Commission is set out in annex 16.

2.11 On the basis of the support of the delegations who spoke, the Committee agreed to carefully monitor the impact of the ongoing military conflict between the Russian Federation and Ukraine on the marine environment and invited flag and coastal States and all other relevant parties to keep the Committee informed of any developments in that context.

2.12 Subsequently, the Russian Federation, inter alia:

- .1 expressed appreciation to the Secretary-General, the Secretariat and the Government of Türkiye for efforts related to implementing the Black Sea Grain Initiative;
- .2 stated that the Russian Federation was continuing to uphold its obligations pursuant to all IMO instruments;
- .3 exemplified the substantial risks created by the Ukrainian military forces to the marine environment by several attacks of Ukraine on the Russian oil platforms in the Black Sea when lives of civilians were lost;
- .4 stressed that disruptions to the supply chain and increased risks to the marine environment were the result of sanctions imposed on the Russian Federation, including through the suspension of regional and bilateral cooperation in respect of pollution prevention and response; and
- .5 reminded the Committee that the humanitarian maritime corridor had been established by the Russian Federation in the Black Sea and called for the earliest possible evacuation of ships and seafarers stranded in Ukrainian ports.

2.13 As requested, the full statement by the Russian Federation is set out in annex 16.

Outcome of C 127 concerning other matters relevant to the Committee's work

2.14 The Committee noted that C 127 had endorsed:

- .1 the inclusion of a new output on "Development of a guide compiling best practices to develop local-level marine spill contingency plans to aid States, particularly local governments and key institutions, in implementing the OPRC Convention and OPRC-HNS Protocol" in the Committee's post-biennial agenda;
- .2 the decision of the Committee to extend the CCC Sub-Committee's meeting time to eight days (while maintaining four days' interpretation) for two sessions starting with CCC 8; and
- .3 the Committee's approval of the holding of:
 - .1 the thirteenth meeting of the Intersessional Working Group on Reduction of GHG Emissions from Ships from 5 to 9 December 2022;
 - .2 two meetings of the Intersessional Working Group on Reduction of GHG Emissions from Ships between MEPC 79 and MEPC 80; and
 - .3 an intersessional meeting of the ESPH Working Group in the second half of 2023.

Other urgent matters emanating from MSC 106

2.15 The Committee agreed to take into account other urgent matters emanating from MSC 106 under relevant agenda items.

Outcome of C 128 concerning other matters relevant to the Committee's work

2.16 The Committee noted the outcome of C 128 in relation to multilingualism and the inclusion of relevant references in the Strategic Plan. In particular, the Committee noted that:

- .1 C 128 had agreed to the revised timetable for the development of the Strategic Plan for the six-year period 2024 to 2029; and
- .2 the Working Group on the Strategic Plan, which had been established during C 128, had agreed that multilingualism should be incorporated in the overarching principles of the Strategic Plan, as multilingualism should be considered in all of IMO's work, and that a reference to multilingualism should also be included under strategic direction 8 (Ensure organizational effectiveness) to allow for a potential alignment of future performance indicators and outputs on multilingualism.

2.17 Additionally, the Committee noted that C 128 had:

- .1 endorsed the finalized terms of reference of the Voluntary Multi-Donor Trust Fund to facilitate the participation of developing countries, especially small island developing States (SIDS) and least developed countries (LDCs) in IMO meetings; and

- .2 agreed to review the terms of reference, based on the experience of the first full year of operations of the Fund, no later than the 131st session of the Council.

2.18 With regard to the remaining outcomes of C 128, the Committee noted that they would be reported to MEPC 80.

3 CONSIDERATION AND ADOPTION OF AMENDMENTS TO MANDATORY INSTRUMENTS

Amendments to mandatory instruments

3.1 The Committee was invited to consider and adopt proposed amendments to:

- .1 MARPOL Annexes I, II and IV concerning regional reception facilities within Arctic waters and the Form of the IOPP Certificate and Supplements;
- .2 MARPOL Annex V concerning regional reception facilities within Arctic waters and Garbage Record Book;
- .3 MARPOL Annex VI concerning the Mediterranean Sea Emission Control Area for Sulphur Oxides and Particulate Matter; and
- .4 MARPOL Annex VI concerning regional reception facilities within Arctic waters, information to be included in the bunker delivery note (BDN) and information to be submitted to the IMO Ship Fuel Oil Consumption Database; and

to approve:

- .5 the draft amendments to the *2012 Guidelines for the development of a regional reception facilities plan*.

3.2 The Committee noted that the text of the aforementioned amendments had been circulated, in accordance with article 16(2)(a) of MARPOL, to all IMO Members and Parties to MARPOL by Circular Letters nos.4578 and 4579 of 10 June 2022.

3.3 The Committee recalled that under agenda item 1 it had established the Drafting Group on Amendments to Mandatory Instruments and had instructed it to start its work on the editorial review of the draft amendments and had agreed to consider only substantive comments to the proposed amendments in plenary.

Draft amendments to MARPOL Annexes I, II and IV concerning regional reception facilities within Arctic waters and Form of the IOPP Certificate and Supplements

3.4 The Committee recalled that MEPC 78 had approved draft amendments to MARPOL Annexes I, II and IV concerning regional reception facilities within Arctic waters and Form of the IOPP Certificate and Supplements, as set out in the annex to document MEPC 79/3, with a view to adoption at this session.

3.5 Having noted that no comments had been submitted on the draft amendments, the Committee confirmed their contents, subject to any editorial improvements.

3.6 The Committee confirmed the contents of the requisite resolution and agreed that the entry-into-force date of the amendments to MARPOL Annexes I, II and IV would be 1 May 2024, and instructed the Drafting Group to prepare the final text of the requisite MEPC resolution, together with the amendments to the MARPOL Annexes I, II and IV, for the Committee's consideration and adoption.

Draft amendments to MARPOL Annex V concerning regional reception facilities within Arctic waters and Garbage Record Book

3.7 The Committee recalled that MEPC 78 had approved draft amendments to MARPOL Annex V concerning regional reception facilities within Arctic waters and Garbage Record Book, as contained in the annex to document MEPC 79/3/1, with a view to adoption at this session.

3.8 Having noted that no comments had been submitted on the draft amendments, the Committee confirmed their contents, subject to any editorial improvements.

3.9 The Committee confirmed the contents of the requisite resolution and agreed that the entry-into-force date of the amendments to MARPOL Annex V would be 1 May 2024 and instructed the Drafting Group to prepare the final text of the requisite MEPC resolution, together with the amendments to MARPOL Annex V, for the Committee's consideration and adoption.

Draft amendments to MARPOL Annex VI concerning the designation of a Mediterranean Sea Emission Control Area for Sulphur Oxides and Particulate Matter

3.10 The Committee recalled that MEPC 78 had approved draft amendments to MARPOL Annex VI concerning the designation of a Mediterranean Sea Emission Control Area for Sulphur Oxides and Particulate Matter, as set out in the annex to document MEPC 79/3/2, with a view to adoption at this session.

3.11 The Committee considered document MEPC 79/3/6 (FOEI, et al.) supporting the designation of a Mediterranean SO_x Emission Control Area, as well as the importance of continued work on ship air pollution in other parts of Europe and the Arctic and noted the information contained therein.

3.12 A number of delegations highlighted the importance of non-Parties within the Mediterranean region to ratify MARPOL Annex VI prior to the entry into force of the amendments establishing the Mediterranean Sea Emission Control Area for Sulphur Oxides and Particulate Matter so as to ensure uniform implementation of the new requirements.

3.13 The Committee confirmed the contents of the requisite resolution and agreed that the entry-into-force date of the amendments to MARPOL Annex VI would be 1 May 2024 and instructed the Drafting Group to prepare the final text of the requisite MEPC resolution, together with the amendments to MARPOL Annex VI, for the Committee's consideration and adoption.

Draft amendments to MARPOL Annex VI concerning regional reception facilities within Arctic waters, information to be included in the bunker delivery note (BDN) and information to be submitted to the IMO Ship Fuel Oil Consumption Database

3.14 The Committee recalled that MEPC 78 had approved draft amendments to MARPOL Annex VI concerning regional reception facilities within Arctic waters, information to be included in the BDN and information to be submitted to the IMO Ship Fuel Oil Consumption Database, as set out in the annex to document MEPC 79/3/3, with a view to adoption at this session.

3.15 The Committee considered document MEPC 79/3/5 (IMarEST) proposing further modifications to the text of appendix V of MARPOL Annex VI, related to information to be included in the BDN, and the possible need for establishing alternative arrangements for sampling low-flashpoint fuels, and noted that the issue of flashpoint had also been discussed at MSC 106 in connection with amendments to SOLAS chapter II-2, adopted at that session.

3.16 A number of delegations expressed their views on the issues identified in document MEPC 79/3/5 with respect to the inclusion of a reference to the closed cup test for determining flashpoint within the text of MARPOL Annex VI for the purposes of the bunker delivery note, as summarized below.

3.17 Notwithstanding the decision of MSC 106, some delegations remained of the view that a reference to the closed cup method for determining flashpoint should be included in the text of MARPOL VI, as the decision to exclude similar wording in the amendments to SOLAS chapter II-2 considered at MSC 106 was made on the basis that a reference to the closed cup test was already included in regulation 3.24 of SOLAS chapter II-2. Other delegations were of the view that the existing text approved at MEPC 78 that included a reference in the footnote to the approved test method was sufficient.

3.18 One delegation recommended the inclusion of wording similar to that found in resolution A.911(22), i.e. "in accordance with standards acceptable to the Organization". Other delegations underscored the need for consistency in the application of the requirements between MARPOL and SOLAS.

3.19 In addition to the above considerations, several delegations noted that a number of parameters within the BDN did not apply to low-flashpoint fuels and that these should be addressed in a new work output, as proposed by the observer from IMarEST in document MEPC 79/3/5.

3.20 The Committee confirmed the contents of the requisite resolution and agreed that the entry-into-force date of the amendments to MARPOL Annex VI would be 1 May 2024.

3.21 Based on a proposal made in plenary with regard to the information to be submitted to the IMO Ship Fuel Oil Consumption Database, the Committee agreed to the inclusion of an additional operative paragraph in the covering resolution inviting early application of this amendment from 1 January 2024, given the entry-into-force date of 1 May 2024.

3.22 Having considered the various proposals to the draft amendments, the Committee instructed the Drafting Group to prepare the final text of the requisite MEPC resolution, together with the amendments to MARPOL Annex VI, taking into account the decisions taken in plenary, as well as document MEPC 79/3/5 and the outcome of MSC 106, ensuring consistency between the amendment under consideration and the amendments to SOLAS chapter II-2 adopted by MSC 106, for the Committee's consideration and adoption. The Committee also instructed the Drafting Group to advise on any requirements for future amendments, in particular to address issues raised with respect to application of the BDN requirements to low-flashpoint fuels.

Draft amendments to the 2012 Guidelines for the development of a regional reception facilities plan

3.23 The Committee recalled that MEPC 78 had approved draft amendments to the *2012 Guidelines for the development of a regional reception facilities plan* and the associated draft MEPC resolution, as contained in the annex to document MEPC 79/3/4, with a view to adoption at this session.

3.24 Having noted that no comments had been submitted on the draft amendments, the Committee confirmed their contents, subject to any editorial improvements.

3.25 The Committee confirmed the contents of the requisite resolution and instructed the Drafting Group to prepare the final text of the draft amendments to the *2012 Guidelines for the development of a regional reception facilities plan* and the associated draft MEPC resolution, for the Committee's consideration and adoption.

Establishment of the Drafting Group on Amendments to Mandatory Instruments

3.26 The Committee established the Drafting Group on Amendments to Mandatory Instruments and instructed it, taking into account comments, proposals and decisions made in plenary, to:

- .1 prepare the final text of the draft amendments to MARPOL Annexes I, II and IV concerning regional reception facilities within Arctic waters and Form of IOPP Certificate and Supplements, using document MEPC 79/3 as the basis;
- .2 prepare the final text of the draft amendments to MARPOL Annex V concerning regional reception facilities within Arctic waters and Garbage Record Book, using document MEPC 79/3/1 as the basis;
- .3 prepare the final text of the draft amendments to MARPOL Annex VI concerning Mediterranean Sea Emission Control Area for Sulphur Oxides and Particulate Matter (SO_x ECA), using document MEPC 79/3/2 as the basis;
- .4 prepare the final text of the draft amendments to MARPOL Annex VI concerning regional reception facilities within Arctic waters, information to be included in the BDN and information to be submitted to the IMO Ship Fuel Oil Consumption Database, using document MEPC 79/3/3 as the basis, taking into account document MEPC 79/3/5 and relevant outcome of MSC 106;
- .5 prepare the final text of the draft amendments to the *2012 Guidelines for the development of a regional reception facilities plan*, using document MEPC 79/3/4 as the basis; and
- .6 assess the implications for capacity-building and technical cooperation and assistance of the amendments to the mandatory instruments submitted for adoption at this session, against the procedures and criteria for identification of capacity-building implications set out in annex 2 to the Committees' Guidelines (MSC-MEPC.1/Circ.5/Rev.3) and advise the Committee as appropriate.

Report of the Drafting Group

3.27 Having considered the report of the Drafting Group (MEPC 79/WP.7), the Committee approved it in general and took action as indicated below.

Amendments to MARPOL Annexes I, II and IV

3.28 The Committee considered the final text of the draft amendments to MARPOL Annexes I, II and IV concerning regional reception facilities within Arctic waters and Form of IOPP Certificate and Supplements (MEPC 79/WP.7, annex 1), and adopted the amendments by resolution MEPC.359(79), as set out in annex 1.

3.29 In adopting resolution MEPC.359(79), the Committee determined, in accordance with article 16(2)(f)(iii) of MARPOL, that the adopted amendments to MARPOL Annexes I, II and IV shall be deemed to have been accepted on 1 November 2023 (unless, prior to that date, objections are communicated to the Secretary-General of the Organization, as provided for in article 16(2)(f)(iii) of the Convention) and shall enter into force on 1 May 2024, in accordance with article 16(2)(g)(ii) of the Convention.

Amendments to MARPOL Annex V

3.30 The Committee considered the final text of the draft amendments to MARPOL Annex V concerning regional reception facilities within Arctic waters and Garbage Record Book (MEPC 79/WP.7, annex 2), and adopted the amendments by resolution MEPC.360(79), as set out in annex 2.

3.31 In adopting resolution MEPC.360(79), the Committee determined, in accordance with article 16(2)(f)(iii) of MARPOL, that the adopted amendments to MARPOL Annex V shall be deemed to have been accepted on 1 November 2023 (unless, prior to that date, objections are communicated to the Secretary-General of the Organization, as provided for in article 16(2)(f)(iii) of the Convention) and shall enter into force on 1 May 2024, in accordance with article 16(2)(g)(ii) of the Convention.

Amendments to MARPOL Annex VI concerning the designation of a Mediterranean Sea Emission Control Area for Sulphur Oxides and Particulate Matter

3.32 The Committee considered the final text of the draft amendments to MARPOL Annex VI concerning the designation of a Mediterranean Sea Emission Control Area for Sulphur Oxides and Particulate Matter (MEPC 79/WP.7, annex 3), and adopted the amendments by resolution MEPC.361(79), as set out in annex 3.

3.33 In adopting resolution MEPC.361(79), the Committee determined, in accordance with article 16(2)(f)(iii) of MARPOL, that the adopted amendments to MARPOL Annex VI shall be deemed to have been accepted on 1 November 2023 (unless, prior to that date, objections are communicated to the Secretary-General of the Organization, as provided for in article 16(2)(f)(iii) of the Convention) and shall enter into force on 1 May 2024, in accordance with article 16(2)(g)(ii) of the Convention.

3.34 The delegation of France and the observer from UNEP welcomed the adoption of the amendments to MARPOL Annex VI establishing the Mediterranean Sea Emission Control Area for Sulphur Oxides and Particulate Matter, recognizing it as an important milestone for the region, achieved through ambitious multilateral cooperation amongst the Parties to the Barcelona Convention, catalysed by the UNEP Mediterranean Action Plan. The full statement by the observer from UNEP is set out in annex 16.

Amendments to MARPOL Annex VI concerning regional reception facilities within Arctic waters, information to be included in the BDN and information to be submitted to the IMO Ship Fuel Oil Consumption Database

3.35 The Committee considered the final text of the draft amendments to MARPOL Annex VI concerning regional reception facilities within Arctic waters, information to be included in the BDN and information to be submitted to the IMO Ship Fuel Oil Consumption Database (MEPC 79/WP.7, annex 4).

3.36 Having noted that the draft amendments related to information to be included in the BDN, as finalized by the Drafting Group, did not resolve the requirement for testing and including flashpoint information on the BDN for low-flashpoint fuels, which was inconsistent with the recent amendments to SOLAS chapter II-2 adopted at MSC 106, the observer from IMarEST proposed further modifications to the draft amendments to appendix V of MARPOL Annex VI with a view to resolving the matter prior to adoption of the current amendments.

3.37 While a number of delegations concurred with the issue raised by the observer from IMarEST, they could not agree to the proposed modifications to the text at this stage, and instead supported the recommendation by the Drafting Group with the Committee's understanding that the flashpoint requirements would not be applied to low-flashpoint fuels. Interested Member States and international organizations were invited to submit proposals to the next session, with specific reference made to establishing an exemption for low-flashpoint fuels in regulation 18.4 of MARPOL Annex VI, to resolve the matter under existing output 3.7.

3.38 Following consideration, the Committee adopted the above-mentioned amendments by resolution MEPC.362(79), as set out in annex 4. In adopting resolution MEPC.362(79), the Committee determined, in accordance with article 16(2)(f)(iii) of MARPOL, that the adopted amendments to MARPOL Annex VI shall be deemed to have been accepted on 1 November 2023 (unless, prior to that date, objections are communicated to the Secretary-General of the Organization, as provided for in article 16(2)(f)(iii) of the Convention) and shall enter into force on 1 May 2024, in accordance with article 16(2)(g)(ii) of the Convention.

Amendments to the 2012 Guidelines for the development of a regional reception facilities plan

3.39 The Committee considered the final text of the draft amendments to the *2012 Guidelines for the development of a regional reception facilities plan* (MEPC.221(63)) and the associated draft MEPC resolution (MEPC 79/WP.7, annex 5), and adopted the amendments by resolution MEPC.363(79), as set out in annex 5.

3.40 In adopting resolution MEPC.363(79), the Committee invited Member States to apply the 2012 Guidelines, as amended, when considering the development of a regional reception facilities plan, upon the entry into force of the amendments to MARPOL Annexes I, II, IV, V and VI on regional reception facilities within Arctic waters.

Assessment of capacity-building and technical cooperation and assistance implications for the draft amendments to mandatory instruments

3.41 The Committee considered the outcome of the Group's discussions and its assessment of capacity-building implications and technical cooperation and assistance needs related to the draft amendments to mandatory instruments. It noted, in particular, the views of the Group highlighting that the substantive knowledge and technical expertise for conducting this assessment did not rest within the Drafting Group and recommended that alternative arrangements should be considered, such as reinstating this as an item on the Committee's agenda, for future sessions.

3.42 To ensure a consistent approach to that agreed by the Maritime Safety Committee on this matter, the Committee invited interested Member States to consider the matter and submit proposals to address the issue at a future session.

Instructions to the Secretariat

3.43 In adopting the aforementioned amendments, the Committee authorized the Secretariat, when preparing the authentic texts, to make any editorial corrections that may be identified as appropriate, including updating references to renumbered paragraphs, and to bring to the attention of the Committee any errors or omissions requiring action by the Parties to MARPOL.

Expression of appreciation

3.44 The Committee, having noted that this was Mr. Holger Steinbock of Germany's last session as the Chair of the Drafting Group, expressed its sincere thanks and appreciation for his invaluable contribution to the work of the Drafting Group on Amendments to Mandatory Instruments over his eight years as Chair since MEPC 66.

4 HARMFUL AQUATIC ORGANISMS IN BALLAST WATER

4.1 The Committee recalled that the Ballast Water Review Group was expected to be established at this session, having recalled the request by the Group at its last session.

4.2 In the interest of time, the Committee agreed to refer all documents to the Ballast Water Review Group for detailed consideration in accordance with the respective terms of reference set out in document MEPC 79/WP.2, with the exception of the following matters:

- .1 approval of ballast water management systems that make use of Active Substances;
- .2 information on the type approval of ballast water management systems; and
- .3 application of the BWM Convention to specific ship types.

4.3 With regard to the issues referred directly to the Ballast Water Review Group, the Committee had for its consideration documents, both submitted to this session and deferred by MEPC 78, addressing the following issues:

- .1 amendments to appendix II of the Annex to the BWM Convention (Form of Ballast Water Record Book) and other matters relating to the Ballast Water Record Book (documents MEPC 79/4/4, MEPC 79/4/5, MEPC 79/4/9, MEPC 79/4/10 and MEPC 79/4/14);
- .2 temporary storage of grey water or treated sewage in ballast tanks (documents MEPC 79/4/8, MEPC 79/4/11 and MEPC 78/4);
- .3 application of the BWM Convention to ships operating at ports with challenging water quality (documents MEPC 79/4/12, MEPC 79/4/13, MEPC 79/4/15 and MEPC 79/INF.6);
- .4 amendments to the appendix of the 2017 Guidelines (G6) (Example ballast water reporting form) (document MEPC 78/4/7); and
- .5 unified interpretations to provisions of the BWM Convention (documents MEPC 79/4/6 and MEPC 79/4/7).

Ballast Water Record Book

4.4 With regard to proposed amendments to appendix II of the annex to the BWM Convention (Form of Ballast Water Record Book) and other consequential matters relating to the Ballast Water Record Book, the Committee had for its consideration the following documents, which were referred to the Ballast Water Review Group:

- .1 MEPC 79/4/4 (India), proposing amendments to appendix II to the BWM Convention (Form of Ballast Water Record Book), aiming to provide clarity on information pertaining to ballast water operations that would be recorded by ships, accompanied also by a related guidance document additionally proposed in document MEPC 79/4/5;
- .2 MEPC 79/4/5 (India), proposing the issuance of a circular, complementing the proposal for amendments to appendix II to the BWM Convention (Form of Ballast Water Record Book), providing guidance for recording operations in the Ballast Water Record Book, subject to the Committee approving the proposed amendments to appendix II of the BWM Convention as set out in document MEPC 79/4/4;
- .3 MEPC 79/4/9 (India), proposing draft amendments to the BWM Convention for an Electronic Ballast Water Record Book in line with resolutions MEPC.314(74), MEPC.316(74) and MEPC.317(74), and suggesting the development of a guideline for the use of electronic Ballast Water Record Books under the BWM Convention in line with the *Guidelines for the use of electronic record books under MARPOL* (resolution MEPC.312(74));
- .4 MEPC 79/4/10 (India), proposing a draft guideline along the lines of resolution MEPC.312(74) that would incorporate the Ballast Water Record Book under the proposed Guidelines for the use of electronic record books under the Ballast Water Management Convention; and
- .5 MEPC 79/4/14 (China), providing comments on documents MEPC 79/4/4 and MEPC 79/4/5, in general supporting the proposed revised form of the Ballast Water Record Book (BWRB) and the draft guidance for recording operations in the BWRB, suggesting however that the proposed Ballast Water Log (BWRB part II) should be used on a voluntary basis.

Temporary storage of grey water or treated sewage in ballast tanks

4.5 With regard to the temporary storage of grey water or treated sewage in ballast tanks, the Committee had for its consideration the following documents, which were referred to the Ballast Water Review Group:

- .1 MEPC 79/4/8 (China), discussing the feasibility of temporary storage of grey water and treated sewage (effluent) by a sewage treatment plant in ballast tanks, proposing issues that need further consideration when developing guidance on temporary storage of grey water or treated sewage in ballast tanks, and providing possible amendments to the BWM Convention, so as to provide information for consideration in developing a BWM or MEPC circular and amendments to the BWM Convention;

- .2 MEPC 79/4/11 (India et al.), providing a draft for guidance on the temporary storage of treated sewage and grey water in ballast tanks, in order to establish a uniform procedure that would minimize the impact on the environment while ensuring practicability for existing ships, in light of the actual needs for storage of such water in ballast tanks at specific ports and areas; and
- .3 MEPC 78/4 (IACS), seeking the Committee's confirmation of the permission for the temporary storage of grey water or treated sewage in the ballast water tanks under the BWM Convention.

Application of the BWM Convention to ships operating at ports with challenging water quality

4.6 With regard to the application of the BWM Convention to ships operating at ports with challenging water quality, the Committee had for its consideration the following documents, which were referred to the Ballast Water Review Group:

- .1 MEPC 79/4/12 (INTERCARGO and BEMA), presenting industry views and proposals relevant to the issue of ships operating at ports with challenging water quality that could be used to support development of guidance on this matter;
- .2 MEPC 79/4/13 (China and Republic of Korea), proposing draft guidance on application of ballast water exchange plus treatment (BWE+BWT) to promote the consistent implementation of the BWM Convention worldwide and to provide a compromise solution for ships operating at ports with challenging water quality;
- .3 MEPC 79/4/15 (Canada), commenting on the proposals for addressing challenging ballast water quality in documents MEPC 79/4/12 and MEPC 79/4/13, providing information on Canadian research, and reinforcing the need to promote the development and use of robust ballast water management systems; and
- .4 MEPC 79/INF.6 (Global TestNet), summarizing views from testing organizations on the challenges posed by ports with challenging conditions, making suggestions for the development of a water quality database for ports to be considered as challenging so that testing protocols could be defined accordingly, and suggesting that further verification of technologies to manage such water quality conditions was necessary.

Example ballast water reporting form

4.7 With regard to proposed amendments to the appendix of the *2017 Guidelines for ballast water exchange (G6)* (Example ballast water reporting form), the Committee had for its consideration document MEPC 78/4/7 (China), which was referred to the Ballast Water Review Group, proposing to amend the example ballast water reporting form in the appendix of the 2017 Guidelines (G6), noting that there were differences in the relevant pre-arrival reporting requirements of various States and that the report forms were complex, and proposing the usage of a unified example ballast water reporting form.

Unified interpretations to provisions of the BWM Convention

4.8 With regard to proposed unified interpretations to provisions of the BWM Convention, the Committee had for its consideration the following documents, which were referred to the Ballast Water Review Group:

- .1 MEPC 79/4/6 (IACS), proposing a unified interpretation of paragraph 4.10 of the *Code for Approval of Ballast Water Management Systems* (BWMS Code) (resolution MEPC.300(72)) concerning requirements for the calibration of the BWMS components that take measurements; and
- .2 MEPC 79/4/7 (IACS), seeking clarification on the issue of commissioning testing of a ballast water management system which has undergone a major modification or an upgrade on board an existing ship in order to improve the performance of the BWMS and ensure compliance with the D-2 standard, and proposing a unified interpretation of regulation E-1.1.5 and the Form of the International Ballast Water Management Certificate.

Approval of ballast water management systems that make use of Active Substances

4.9 Following consideration of the report of the forty-second meeting of the GESAMP-BWWG (MEPC 79/4/3), the Committee approved the report in general and concurred with the recommendations to:

- .1 grant Final Approval to the RADClean® BWMS submitted by the Islamic Republic of Iran in document MEPC 79/4;
- .2 grant Final Approval to the ECS-HYCHLOR™ 2.0 System submitted by the United Kingdom in document MEPC 79/4/1; and
- .3 not grant Basic Approval to AirTree BWMS ABWOT submitted by Germany in document MEPC 79/4/2.

4.10 The Committee invited the Administrations of the Islamic Republic of Iran and the United Kingdom to verify that all the recommendations contained in the report of the forty-second meeting of the GESAMP-BWWG (MEPC 79/4/3, annexes 4 and 5) were fully addressed during the further development of the ballast water management systems.

4.11 The Committee also invited the Administration of Germany to verify that all the concerns and issues raised in the report of the forty-second meeting of the GESAMP-BWWG (MEPC 79/4/3, annex 6) were fully addressed prior to any subsequent re-submission for Basic Approval.

Future meetings of the GESAMP-BWWG

4.12 The Committee noted that the forty-third meeting of the GESAMP-BWWG was scheduled for 20 to 24 February 2023 and detailed information was specified in BWM.2/Circ.76.

Organizational arrangements related to the evaluation and approval of ballast water management systems

4.13 The Committee noted the Group's decision to request the Secretariat to move the list of appropriate detection limits for chemicals most commonly associated with treated ballast water from appendix 7 of the annex to its Methodology (BWM.2/Circ.13, as revised) to the IMO website.

Type approval of ballast water management systems

4.14 The Committee noted the information regarding type-approved ballast water management systems provided in the following documents:

- .1 MEPC 79/INF.5 (Norway) on the type approval of the ballast water management system Senza BWMS;
- .2 MEPC 79/INF.7 (Finland) on the type approval of the LanghBW ballast water management system;
- .3 MEPC 79/INF.12 (Norway) on amendments to the type approval of the CHIT's BLUE OCEAN SHIELD ballast water management system;
- .4 MEPC 79/INF.14 (Republic of Korea) on the type approval of the Hyundai Heavy Industries Co., Ltd. HiBallast NF™ ballast water management system;
- .5 MEPC 79/INF.15 (Republic of Korea) on the type approval of the AQUASTAR CO., LTD. AQUASTAR™ ballast water management system; and
- .6 MEPC 79/INF.17 (Republic of Korea) on the type approval of the SAMKUN CENTURY Co., Ltd ARA Plus+ BWMS ballast water management system.

Application of the BWM Convention to specific ship types

4.15 With regard to the application of the BWM Convention to specific ship types, the Committee had for its consideration document MEPC 78/4/9 (Russian Federation), containing proposals regarding the application of the BWM Convention to multipurpose salvage ships, and presenting the analysis of experience on the application of the BWM Convention to such ships, as well as proposals for the possible application of the Convention to such ship types on the basis of the said experience, including proposed amendments to regulation A-5 and to the *Guidelines for ballast water management equivalent compliance* (G3).

4.16 In the ensuing discussion, many delegations expressed the view that the BWM Convention provided sufficient options for addressing the issues raised in this document and that, therefore, there was no need for any action, including amendments that could undermine the effectiveness of the Convention. In light of this, the Committee did not agree with the proposals contained in this document.

Establishment of the Ballast Water Review Group

4.17 The Committee established the Ballast Water Review Group and instructed it, taking into consideration the comments and decisions made in plenary, to:

- .1 finalize the amendments to appendix II of the Annex to the BWM Convention (Form of Ballast Water Record Book), using document MEPC 79/4/4 as the basis and taking into account the relevant comments in document MEPC 79/4/14;
- .2 subject to the finalization of the amendments under term of reference 1, consider the consequential proposals contained in documents MEPC 79/4/5, MEPC 79/4/9 and MEPC 79/4/10 regarding further actions relating to the Ballast Water Record Book, taking also into account the relevant comments in document MEPC 79/4/14, and advise the Committee accordingly;
- .3 consider whether, in the context of the BWM Convention, the temporary storage of grey water or treated sewage in ballast tanks should be permitted, and, if the permission were confirmed, consider the proposals contained in documents MEPC 79/4/8 and MEPC 79/4/11 regarding guidance on the temporary storage of grey water or treated sewage in ballast tanks, and advise the Committee accordingly;
- .4 consider the proposals contained in documents MEPC 79/4/12 and MEPC 79/4/13 regarding ship operations at ports with challenging water quality, taking also into account the relevant comments in document MEPC 79/4/15 and the information contained in document MEPC 79/INF.6, and advise the Committee accordingly;
- .5 consider the proposals contained in document MEPC 78/4/7 concerning amendments to the appendix of the 2017 Guidelines (G6) (Example ballast water reporting form), and advise the Committee accordingly;
- .6 consider the need for a unified interpretation of paragraph 4.10 of the BWMS Code as proposed in document MEPC 79/4/6 and, if appropriate, prepare a draft unified interpretation for inclusion in a further revision of BWM.2/Circ.66 (i.e. BWM.2/Circ.66/Rev.4); and
- .7 consider the need for a unified interpretation of regulation E-1.1.5 of the BWM Convention and the Form of the International Ballast Water Management Certificate as proposed in document MEPC 79/4/7 and, if appropriate, prepare a draft unified interpretation for inclusion in a further revision of BWM.2/Circ.66 (i.e. BWM.2/Circ.66/Rev.4).

Report of the Ballast Water Review Group

4.18 Having considered the report of the Ballast Water Review Group (MEPC 79/WP.6), the Committee approved it in general and took action as outlined below.

Ballast Water Record Book

4.19 The Committee approved the draft amendments to appendix II of the Annex to the BWM Convention (Form of Ballast Water Record Book), set out in annex 6, and for circulation in accordance with article 19(2)(a) of the BWM Convention, with a view to adoption by MEPC 80.

4.20 The Committee also invited interested Member States and international organizations to submit concrete proposals on the development of guidance for record-keeping and reporting under the BWM Convention, taking into account documents MEPC 78/4/7, MEPC 79/4/4, annex 2, and MEPC 79/4/5, and the relevant elements set out in document MEPC 79/WP.6, paragraphs 33 to 35 and annex 2.

4.21 Furthermore, the Committee noted that, owing to time constraints, the Group had not been able to consider the proposals relating to electronic Ballast Water Record Books, and subsequently deferred the consideration of documents MEPC 79/4/9 and MEPC 79/4/10 to the next session, in conjunction with any further submissions on this matter.

Temporary storage of treated sewage and grey water in ballast tanks

4.22 The Committee endorsed the Group's view that the Convention did not preclude the temporary storage of grey water or treated sewage in ballast tanks, and furthermore that this storage should be permitted, and that guidance should be developed.

4.23 In addition, the Committee noted that, owing to time constraints, the Group had not been able to consider the proposals contained in documents MEPC 79/4/8 and MEPC 79/4/11 regarding the development of guidance for the temporary storage of grey water or treated sewage in ballast tanks, and consequently deferred the consideration of these documents to the next session, in conjunction with any further submissions on this matter.

Application of the BWM Convention to ships operating at ports with challenging water quality

4.24 The Committee, having noted the Group's consideration on the matter, invited interested Member States and international organizations to submit concrete proposals on guidance for ships encountering challenging uptake water, taking into account the relevant elements set out in annex 4 to document MEPC 79/WP.6.

Example ballast water reporting form

4.25 The Committee noted that further work on this matter would be considered as part of the development of guidance for record-keeping and reporting under the BWM Convention (see paragraph 4.20).

Unified interpretations to provisions of the BWM Convention

4.26 The Committee approved the unified interpretation of paragraph 4.10 of the BWMS Code, set out in annex 7, and instructed the Secretariat to circulate it by means of BWM.2/Circ.66/Rev.4, consolidating all existing unified interpretations of the BWM Convention.

4.27 In addition, the Committee approved the revised unified interpretation of regulation E-1.1.5 of the BWM Convention and the Form of the International Ballast Water Management Certificate, also set out in annex 7, and instructed the Secretariat to circulate it by means of BWM.2/Circ.66/Rev.4.

Future work

4.28 The Committee noted the request of the Group on re-establishment of the Review Group at MEPC 80, in accordance with the provisions of regulation D-5 of the BWM Convention, to consider also those terms of reference that could not be concluded at this session owing to time constraints.

5 AIR POLLUTION PREVENTION

Introduction

5.1 In the interests of time, the Committee agreed to refer all documents submitted under this agenda item as well as relevant documents deferred from previous sessions to the Air Pollution and Energy Efficiency Working Group for detailed consideration in accordance with the respective terms of reference set out in document MEPC 79/WP.2, with the exception of the following matters:

- .1 matters related to exhaust gas cleaning systems (EGCS); and
- .2 matters related to Black Carbon.

5.2 With regard to the issues referred directly to the Air Pollution and Energy Efficiency Working Group under this agenda item, the Committee had for its consideration documents, both submitted to this session and deferred by previous sessions, addressing the following issues:

- .1 bunker licensing schemes (documents MEPC 79/5 (ICS et al.) and MEPC 79/INF.24 (BIMCO and IBIA)); and
- .2 biofuels, biofuel blends and synthetic drop-in fuels, limited to matters related to the NO_x Technical Code, ISO 8217, sea trials, and Black Carbon (MEPC 79/5/2 (India), MEPC 79/7/9 (EUROMOT), MEPC 79/7/23 (paragraphs 20.3.2 and 20.9) (Brazil), MEPC 79/INF.25 (India), MEPC 78/5 (India), MEPC 78/7/28 (Canada), MEPC 78/INF.10 (France), MEPC 77/7/7 (paragraphs 12 and 16) (IACS), MEPC 76/7/22 (Denmark et al.) and MEPC 76/7/32 (India).

Matters relating to exhaust gas cleaning systems

5.3 The Committee recalled that MEPC 78 had approved MEPC.1/Circ.899 on *2022 Guidelines for risk and impact assessments of the discharge water from exhaust gas cleaning systems*, having agreed that the Guidelines would be kept under review in light of experience gained, and had approved also MEPC.1/Circ.900 on *2022 Guidance regarding the delivery of EGCS residues to port reception facilities* thereby finalizing parts 1 and 2 of the scope of work of output 1.23, as agreed by MEPC 77.

5.4 The Committee also recalled that the scope of work of output 1.23 on "Evaluation and harmonization of rules and guidance on the discharge of discharge water from EGCS into the aquatic environment, including conditions and areas" also included a part 3 on "regulatory matters" and a part 4 on "database of substances".

5.5 The Committee further recalled that MEPC 78 had agreed to extend the target completion year of this output to 2025, and had further agreed not to include the output in the provisional agenda for PPR 10 and would consider reinstating the output in the provisional agenda of a future PPR Sub-Committee subject to further proposals to the Committee on part 3 and part 4 (MEPC 78/17, paragraph 14.14.3).

5.6 The Committee had for its consideration the following documents concerning this matter:

- .1 MEPC 79/5/1 (CESA), providing considerations on the proposed EGCS discharge emission factors presented in document MEPC 78/9/3 (Germany), and recommending that future submissions proposing representative emission factors should, next to a description of the methodology deployed, include the exact raw data used for the arrival of representative emission factors and should name the source;
- .2 MEPC 79/5/3 (FOEI et al.), outlining how the discharge of wastes from EGCS into the marine environment as an alternative compliance mechanism for SO_x emissions would appear to raise issues of inconsistency with the Law of the Sea obligations of States as set out in UNCLOS to protect and preserve the marine environment, and suggesting steps to address these likely inconsistencies;
- .3 MEPC 79/5/4 (CESA), proposing further modifications to the draft amendments to MARPOL Annex VI with regard to EGCS as proposed in document MEPC 76/9/2 (Austria et al.), in order to ensure uniform regulation and certainty for the industry; and
- .4 MEPC 79/INF.4 (Netherlands), reporting that in 2021, the Netherlands Human Environment and Transport Inspectorate (ILT) carried out 19 EGCS inspections to gain inspection experience; highlighting that the most common deficiencies were related to certification and documentation and a lack of familiarization with the EGCS among crews and that it was difficult to carry out date inspection; and suggesting the need for improvements of maintenance.

5.7 In the ensuing discussion, several delegations, in referring to recent evidence of the harmful impacts of EGCS discharge water on the marine environment, in particular enclosed sea areas, and the need to make progress in addressing this issue, suggested that document MEPC 79/5/1, in particular the proposal therein to establish a methodology for developing emission factors for the environmental risk assessment of EGCS discharge water, should be referred to the PPR Sub-Committee for further consideration, with a view to the Sub-Committee advising the Committee on the best way forward, while at the same time supporting the approach in document MEPC 78/9/3 (Germany) of using "worst-case emission factors". Several delegations highlighted that representative discharge water emission factors should be derived from available data rather than worst-case scenarios, using the largest possible sample set to accurately reflect the composition and volume of discharge, including the influence on the composition background concentration levels already present in the intake water.

5.8 Several delegations, in referring in particular to document MEPC 79/5/3, supported the proposal therein to prohibit the use of scrubbers as an alternative means of compliance under MARPOL Annex VI. Some of these delegations highlighted, in particular, the vulnerability of Arctic Indigenous communities to ocean pollution from wastewater discharge.

5.9 Several other delegations did not support a global prohibition of the use of scrubbers as an alternative means of compliance, highlighting that this would be outside of the scope of work agreed by MEPC 77 for output 1.23. These delegations stressed that a global prohibition would create uncertainty for the industry, which had in good faith invested in EGCS technology in accordance with the provisions of MARPOL Annex VI. Several of these delegations highlighted that the potential risk of EGCS discharge water depended largely on local circumstances, in particular in closed sea areas, and recalled the need to gain experience on the implementation of the *2022 Guidelines for risk and impact assessments of the discharge water from exhaust gas cleaning systems* (MEPC.1/Circ.899). Several delegations, in referring to recent studies and previous documents MEPC 74/INF.24 (Japan), PPR 9/INF.3 (CLIA) and PPR 9/INF.8 (CESA), which showed no to limited effect of EGCS discharge water on the marine environment, stressed the need for evidence-based decision-making on this issue.

5.10 Several delegations suggested that document MEPC 79/5/4 be referred to the PPR Sub-Committee for further consideration in order to develop parts 3 and 4 of the scope of work of output 1.23 and complete that output as soon as possible in view of the need to ensure regulatory uniformity and certainty for the industry and for the purpose of protecting the marine environment. Several delegations, while seeing merit in the proposal in document MEPC 79/5/4, expressed concerns with regard to the proposed changes to the draft amendments set out in annex 3 to document MEPC 76/9/2 (Austria et al.) as the proposed changes would substantially limit the ability of coastal States to implement restrictions of water discharges from EGCS.

5.11 Several delegations requested advice from the Legal Division of the IMO Secretariat regarding document MEPC 79/5/3 on the need to ensure consistency between MARPOL and UNCLOS provisions in relation to EGCS discharge water. One delegation questioned in particular whether, in light of the large quantities of EGCS water discharged from ships into the oceans, the use of EGCS as an alternative compliance method in MARPOL Annex VI was still consistent with UNCLOS. In this regard, one of the co-sponsors of document MEPC 79/5/3 clarified that the inconsistency identified in document MEPC 79/5/3 was not between MARPOL and UNCLOS but rather that the discharge of wastes from EGCS into the marine environment was inconsistent with UNCLOS. Several other delegations, in commenting on document MEPC 79/5/3, did not agree that there was any legal issue or inconsistency with UNCLOS and did not see the need or competence for any legal analysis to be carried out by the IMO Secretariat.

5.12 Several delegations, in referring to information provided in document MEPC 79/INF.4 and to the increasing number of inspections of ships fitted with EGCS, stressed the need to develop a harmonized and improved approach for EGCS inspections. The observer for CESA, in welcoming the document and its content, stated that the potential need for developing industry best practice was being explored and invited interested stakeholders to join this effort.

5.13 Following consideration, the Committee referred documents MEPC 79/5/1, MEPC 79/5/4 and MEPC 79/INF.4 to PPR 11 and instructed the Sub-Committee to consider them further in conjunction with document MEPC 78/9/3, with a view to advising the Committee accordingly.

5.14 With regard to the legal issues raised in document MEPC 79/5/3, the Committee invited the Secretariat to consider providing a legal opinion as appropriate to a future session, taking into account the existing study on *Implications of the United Nations Convention on the Law of the Sea for the International Maritime Organization* (LEG/MISC.8).

5.15 The statement made by the observer from WWF is set out in annex 16.

Matters related to Black Carbon

5.16 The Committee had for its consideration the following documents concerning matters related to Black Carbon:

- .1 MEPC 79/5/5 (FOEI et al.), recalling MEPC's commitment over 11 years ago at MEPC 62 to address the impact of Black Carbon emissions on the Arctic and outlining an approach to amend MARPOL Annex VI to incorporate a requirement for ships to only use marine distillate fuel or other cleaner alternative fuels or methods of propulsion that were safe for ships when operating in or near to the Arctic; and
- .2 MEPC 79/5/6 (FOEI et al.), responding to two submissions (MEPC 79/14/1 (FOEI et al.) and MEPC 79/5/5 (FOEI et al.)) and clarifying why IMO's Arctic heavy fuel oil (HFO) ban was not a substitute for a Black Carbon control measure.

5.17 In the ensuing discussion, several delegations supported documents MEPC 79/5/5 and MEPC 79/5/6 being forwarded to the PPR Sub-Committee for further consideration. In this connection, several delegations, in recalling that the PPR Sub-Committee was still carrying out work in accordance with the terms of reference for output 3.3 (Reduction of the impact on the Arctic of Black Carbon emissions from international shipping), suggested documents MEPC 79/5/5 and MEPC 79/5/6 should be referred to the PPR Sub-Committee only after the finalization of ongoing considerations on the pending work.

5.18 Several delegations, in referring to recent reports highlighting the risk of passing important climate tipping points, in particular in the Arctic region, supported the development of mandatory measures to control Black Carbon emissions in the Arctic from international shipping as soon as possible and urged the Committee to expedite such considerations and, accordingly, to refer document MEPC 79/5/5 to PPR 10.

5.19 Several delegations expressed the view that the effectiveness of resolution MEPC.342(77) encouraging, inter alia, the voluntary use by ships operating in or near the Arctic of distillate fuels or other cleaner alternative fuels or methods of propulsion had yet to be determined and, therefore, it was premature to consider mandating the use of distillate fuels at this stage. Additionally, several delegations stressed the importance of not deviating from the stepwise approach reflected in the terms of reference for output 3.3 that were agreed by MEPC 77.

5.20 Following consideration, the Committee noted document MEPC 79/5/6 and also noted that there was broad support for referring document MEPC 79/5/5 to PPR 10. Consequently, the Committee instructed the PPR Sub-Committee to further consider document MEPC 79/5/5 at its tenth session with a view to advising the Committee.

5.21 The statement made by the observer from WWF is set out in annex 16.

Establishment of the Working Group on Air Pollution and Energy Efficiency

5.22 The Committee established the Working Group on Air Pollution and Energy Efficiency and instructed it to:

- .1 with regard to licensing schemes for bunker suppliers, consider documents MEPC 79/5 (ICS et al.) and MEPC 79/INF.24 (BIMCO and IBIA), and advise the Committee accordingly;

- .2 with regard to biofuels and biofuel blends, consider the proposals in the following documents, but limited to matters related to the NO_x Technical Code, ISO 8217, sea trials and Black Carbon, and advise the Committee accordingly: MEPC 79/5/2 (India), MEPC 79/7/23 (paragraphs 20.3.2 and 20.9) (Brazil) MEPC 79/INF.25 (Republic of Korea), relevant parts of documents MEPC 78/5 (India), MEPC 78/7/28 (Canada), MEPC 78/INF.10 (France), MEPC 77/7/7 (paragraphs 12 and 16) (IACS), MEPC 76/7/22 (Denmark et al.) and MEPC 76/7/32 (India); and
- .3 consider the proposal to extend the scope of the unified interpretation of regulation 18.3 of MARPOL Annex VI concerning the use of biofuels set out in MEPC.1/Circ.795/Rev.6 to include synthetic drop-in fuels, belonging to the group of renewable fuels of non-biological origin, as set out in document MEPC 79/7/9 (EUROMOT), and advise the Committee accordingly.

Report of the Working Group on Air Pollution and Energy Efficiency

5.23 Having considered the relevant parts of the report of the Working Group on Air Pollution and Energy Efficiency (MEPC 79/WP.9), the Committee approved it in general and took action as outlined below.

Licensing schemes for bunker suppliers

5.24 With regard to licensing schemes for bunker suppliers, the Committee noted the information provided in the following documents:

- .1 MEPC 79/5 (ICS et al.), outlining information from fuel samples tested during 2020 especially in relation to the level of sulphur compliance for very low sulphur fuel oil (VLSFO), including geographical differences; and inviting Member States to consider implementing and enforcing a licensing scheme for bunker suppliers operating within their jurisdiction to combat the high level of non-compliance in some poorer performing geographical regions; and
- .2 MEPC 79/INF.24 (BIMCO and IBIA), sharing the results of an industry survey carried out by IBIA and BIMCO which identified broad support among maritime industry stakeholders for the adoption of bunker licensing schemes and mass flow metering systems to improve transparency and market conditions.

5.25 The Committee, having noted the Group's discussion on the matter, encouraged Member States to make use of the revised *Guidance for best practice for Member State/coastal State* set out in circular MEPC.1/Circ.884/Rev.1 and invited interested Member States and international organizations to submit information on experience gained of the implementation of the guidance on best practice and relevant instruments to a future session.

Biofuels and biofuel blends

5.26 With regard to biofuels and biofuel blends, the Committee noted that the Group had considered the following documents:

- .1 MEPC 79/5/2 (India), proposing acceptable criteria for the collection of data in order to assess NO_x as per the onboard simplified measurement method to demonstrate compliance in accordance with paragraph 6.3 of the NO_x Technical Code 2008 in the case of a ship running on biofuel blends;

- .2 MEPC 79/7/23 (paragraphs 20.3.2 and 20.9) (Brazil), providing information on different tests using biofuel blends regarding NO_x Tier II certification and NO_x emissions;
- .3 MEPC 79/INF.25 (Republic of Korea), introducing an onboard demonstration project of biofuels and providing information on emission and performance as a result of using B20 fuel during a 10-day voyage;
- .4 MEPC 78/5 (India), proposing the development of interim guidelines for the usage of biofuel from crops and waste biomass blends, including criteria for NO_x verification of a biofuel blend with both distillate/residual fossil fuels on board and a representative emission factor (C_F) for such biofuels until comprehensive guidelines are prepared, taking into account the life cycle analysis of different types of biofuel;
- .5 MEPC 78/7/28 (Canada), providing a case study of the world's largest trial of biofuels with eight ships using a biodiesel product that was 100% bio-content; and suggesting that biodiesel was a technically viable option for existing ships to reduce well-to-wake GHG emissions;
- .6 MEPC 78/INF.10 (France), providing the results of a marine engine bench measurement campaign intended to evaluate the impact of different blend ratios of biodiesels on the engine's NO_x and Black Carbon emissions; suggesting that in this measurement campaign, the use of Fatty Acid Methyl Ester (FAME) blended in conventional VLSFO did not increase the engine NO_x and Black Carbon emissions overall compared to conventional fossil fuels;
- .7 MEPC 77/7/7 (paragraphs 12 and 16) (IACS), seeking the Committee's direction on the need for amending paragraph 5.3.2 of the NO_x Technical Code to reference recent versions of the ISO 8217 standard (paragraph 12); and also seeking the Committee's intention on future "longer-term" approach to resolve the issues with application of MARPOL Annex VI and NTC with respect to the use of biofuels (paragraph 16);
- .8 MEPC 76/7/22 (Denmark et al.), drawing the attention of the Committee to the conditions for maintaining the NO_x certification of engines in the context of the use of biofuels which could be used by ships to comply with the short-term measures and recommending that a regulatory framework for NO_x compliance of sustainable marine biofuels soon be clarified; and
- .9 MEPC 76/7/32 (India), providing the results of trials of comparing emissions from biofuel blends with those from low sulphur high speed diesel, including consideration of both NO_x emissions and life cycle GHG emissions and suggesting that the Committee consider amendments to MARPOL Annex VI and the NO_x Technical Code in order to clarify the regulatory requirement for the use of biofuel and biofuel blends on board.

5.27 The Committee noted that there was not sufficient support in the Group for the proposal set out in document MEPC 79/5/2 to develop a standard test method for NO_x compliance when using biofuels in accordance with the unified interpretation of regulation 18.3 of MARPOL Annex VI, and invited interested Member States and international organizations to submit additional information on the use of biofuels and biofuel blends in relation to NO_x requirements to a future session.

5.28 The Committee noted the Group's discussion on the proposal, set out in paragraph 12 of document MEPC 77/7/7, to add a reference to the latest version of the ISO 8217 standard in paragraph 5.3.2 of the NO_x Technical Code and, in particular:

- .1 endorsed the Group's understanding that fuels complying with the ISO 8217:2005, 2010, 2012 or 2017 standards, including the FAME products, were the acceptable fuel specifications to be used at the parent engine NO_x emissions test; and
- .2 invited interested Member States and international organizations to submit proposals for draft amendments to paragraph 5.3.2 of the NO_x Technical Code to a future session.

5.29 The Committee noted the Group's consideration of the proposal, set out in paragraph 16 of document MEPC 77/7/7, to establish a "longer-term" approach to resolve the issues with application of MARPOL Annex VI and the NO_x Technical Code with respect to biofuels, in particular the Group's agreement that the current text of the unified interpretation of regulation 18.3 of MARPOL Annex VI with regard to the use of biofuels was sufficient and that there was no need to establish a long-term approach at this stage, and invited interested Member States and international organizations to submit relevant proposals on this issue to a future session.

Amendments to the unified interpretation of regulation 18.3 of MARPOL Annex VI to include synthetic drop-in fuels

5.30 The Committee noted that the Group had considered document MEPC 79/7/9 (EUROMOT), proposing amendments to the unified interpretation of regulation 18.3 of MARPOL Annex VI, set out in circular MEPC.1/Circ.795/Rev.6, to include synthetic drop-in fuels, belonging to the group of renewable fuels of non-biological origin.

5.31 The Committee approved the updated unified interpretation clarifying the application of regulation 18.3 of MARPOL Annex VI for synthetic fuels, as set out in annex 8, and instructed the Secretariat to revise MEPC.1/Circ.795/Rev.6 accordingly, for dissemination as MEPC.1/Circ.795/Rev.7.

6 ENERGY EFFICIENCY OF SHIPS

Introduction

6.1 In the interests of time, the Committee agreed to refer all documents submitted under this agenda item as well as relevant documents deferred from previous sessions to the Working Group on Air Pollution and Energy Efficiency for detailed consideration in accordance with the respective terms of reference set out in document MEPC 79/WP.2, with the exception of the following matters:

- .1 report of fuel oil consumption data submitted to the IMO Ship Fuel Oil Consumption Database in GISIS (reporting year: 2021); and
- .2 matters relating to the possible introduction of EEDI Phase 4.

6.2 With regard to the issues referred directly to the Working Group on Air Pollution and Energy Efficiency Working Group under this agenda item, the Committee had for its consideration documents, both submitted to this session and deferred by previous sessions, addressing the following issues:

- .1 *2018 Guidelines on the method of calculation of the Attained Energy Efficiency Design Index (EEDI) for new ships* and the draft guidance in case of use of a power reserve (documents MEPC 79/6/2 (ICS and RINA), MEPC 79/7/10 (ICS), MEPC 78/6/1 (India), MEPC 78/7/17 (Liberia), MEPC 77/6/2 (Germany), MEPC 77/INF.29 (Germany) and MEPC 76/6/9 (IACS));
- .2 *2014 Guidelines on the survey and certification of the Energy Efficiency Design Index (EEDI)* (documents MEPC 79/6 (ITTC) and MEPC 77/INF.29 (Germany));
- .3 unified interpretation of regulations 2.2.18 and 22 of MARPOL Annex VI (documents MEPC 76/6/3 (China) and MEPC 76/6/5 (CESA));
- .4 unified interpretation of appendix IX of MARPOL Annex VI (document MEPC 79/7/5 (IACS)); and
- .5 unified interpretation of regulations 8, 26.3.1 and 28 of MARPOL Annex VI (document MEPC 79/7/24 (IACS)).

Report of fuel oil consumption data submitted to the IMO Ship Fuel Oil Consumption Database in GISIS (reporting year: 2021)

6.3 The Committee noted document MEPC 79/6/1 (Secretariat) providing the report of the fuel oil consumption data for the period from 1 January 2021 until 31 December 2021 and associated information as reported to the IMO Ship Fuel Oil Consumption Database GISIS module (IMO DCS). The Committee also noted the recommended improvements to the IMO DCS GISIS module by the Secretariat, as set out in paragraphs 9 to 13 of document MEPC 79/6/1.

6.4 Following consideration of the document, the Committee:

- .1 approved, in principle, the summary of the fuel oil consumption data submitted by over 28,000 ships to the IMO Ship Fuel Oil Consumption Database for 2021 as set out in the annex to document MEPC 79/6/1;
- .2 noted the issues with the IMO Ship Fuel Oil Consumption Database module in GISIS and the ongoing improvements to the reporting process, set out in paragraphs 10 to 13 of document MEPC 79/6/1, in particular that, following the entry into force of the short-term GHG reduction measure on 1 November 2022, the Secretariat was in the process of incorporating the new reporting parameters in the IMO DCS module while also assessing further changes to the GISIS module to improve user-friendliness and a Web-based reporting environment;
- .3 approved, in principle, the reporting on carbon intensity developments on the basis of supply-based measurements, using AER and cgDIST indicators, as set out in table 3 in the annex to document MEPC 79/6/1; and

- .4 noted that the Secretariat was currently not in a position to calculate carbon intensity developments on the basis of demand-based measurements and was in the process of procuring such data for future reporting to the Committee.

6.5 In conclusion, the Committee expressed its appreciation to the Secretariat for the thorough analysis, and instructed the Secretariat to continue to maintain the Ship Fuel Oil Consumption module in GISIS, and to proceed with the improvements to the reporting process and the module in GISIS in line with paragraphs 10 to 12 of document MEPC 79/6/1.

Matters relating to the possible introduction of EEDI Phase 4

6.6 The Committee noted that MEPC 74 had established the Correspondence Group on the Possible Introduction of EEDI Phase 4, under the coordination of Japan. The Committee also recalled that it had instructed the Group to submit an interim report to MEPC 75 (documents MEPC 75/6/5 and MEPC 75/INF.8 (Japan)) and a final report to MEPC 76.

6.7 The Committee had for its consideration the final report of the Correspondence Group, which had been submitted to MEPC 76 as document MEPC 76/6 (Japan), along with document MEPC 76/INF.27, providing the collation of the comments received by the Correspondence Group and the other relevant documents:

- .1 MEPC 79/6/3 (WWF et al.), proposing to include all GHG emitted from ships in future phases of the EEDI; proposing regulating tank-to-wake CO₂ equivalents on a 20-year basis beginning with Phase 4, while emphasizing the need for regulating well-to-wake CO₂ equivalents through other short- and mid-term measures; and also proposing to re-establish a correspondence group to develop EEDI Phase 4 requirements;
- .2 MEPC 79/6/4 (Japan), providing Japan's views on the significance of the Energy Efficiency Design Index (EEDI) and commenting on specific issues summarized in the final report of the Correspondence Group on the possible introduction of EEDI Phase 4 (document MEPC 76/6) in order to facilitate further discussion in the Committee;
- .3 MEPC 76/6 (Japan), providing the final report of the Correspondence Group on the Possible Introduction of EEDI Phase 4 established at MEPC 74; indicating that the Group could not fully consider and make a clear recommendation to the Committee on the possible introduction of EEDI Phase 4 requirements owing to the fact that important elements affecting the development of a possible EEDI Phase 4 framework, including development of guidelines on life cycle GHG intensity of marine fuels (LCA guidelines) and safety regulations, were outside the Group's consideration; and providing in annex 3 a list of issues to be considered before determining the possible framework of EEDI Phase 4;
- .4 MEPC 76/INF.27 (Japan), providing comments received during the work of the Correspondence Group on Possible Introduction of EEDI Phase 4 after the submission of the interim report to MEPC 75;

- .5 MEPC 75/6/4 (INTERTANKO), expressing concerns that it would be challenging for VLCCs to meet the EEDI Phase 3 while maintaining a safe level of minimum power; and suggesting that some adjustment in the EEDI requirements or allowance of suitable reserve power should be considered to ensure VLCCs could continue to operate;
- .6 MEPC 75/7/10 (FOEI et al.), containing a proposal to include all GHG emitted from ships in future phases of the EEDI, beginning with Phase 4;
- .7 MEPC 74/5 (IACS), providing information related to the technical consequences on ship machinery design due to the implementation of the EEDI requirements; and
- .8 MEPC 74/5/6 (ICS et al.), calling the attention of the Committee to a range of technical issues and challenges which would need to be considered in order to properly evaluate further evolution of the EEDI regulation and facilitate informed decision-making; also providing proposals to improve the processes of the Organization when considering EEDI reduction rates.

6.8 In this context, the Committee also noted document MEPC 79/INF.9 (Secretariat), providing the twelfth summary of data and graphical representations of the information in the EEDI database.

6.9 In the ensuing discussion, several delegations, in highlighting that the possible introduction of further EEDI phases would be dependent on finalization of the LCA guidelines, suggested keeping the discussion on EEDI Phase 4 in abeyance until the completion of the work on the LCA guidelines, when the Committee could provide further steering on the role and form of future EEDI in the new regulatory context.

6.10 Several delegations expressed the view that a strengthened EEDI framework could provide further synergies with other GHG reduction measures such as the short-term measures to be reviewed by 1 January 2026 and mid- and long-term measures, and that the possible introduction of EEDI Phase 4 should therefore be considered in a holistic manner following the revision of the *Initial IMO Strategy on reduction of GHG emissions from ships*. One delegation suggested further considering the possible introduction of EEDI Phase 4 in future sessions of ISWG-GHG in the context of the Work plan for the development of mid- and long-term measures.

6.11 Several delegations, in referring to document MEPC 76/6 (annex 3) and MEPC 79/6/4, stressed that issues listed in those documents should be further considered before commencing the work on the development of a possible new phase in the EEDI framework.

6.12 Several delegations, in acknowledging the current and expected significance of EEDI in improving the design efficiency of newbuild ships, stressed the need to ensure that the EEDI framework continued to play an important role in utilizing innovative propulsion technologies such as electric batteries and fuel cells and that it should be able to adequately reflect the benefits of other new and innovative technologies such as wind-assisted propulsion. One delegation supported the development of IMO guidelines on demonstrating the effectiveness and performance of energy efficiency technologies for EEDI.

6.13 Several delegations, in referring in particular to document MEPC 79/6/4, stressed that EEDI was a design-based measure, which was neither aimed at, nor capable of, capturing operational practice of ships in terms of energy used on board, and expressed a preference

for considering changing the EEDI framework in Phase 4 to an energy-based index. Several of these delegations specifically stated that the use of alternative fuels and onboard CO₂ capture could not be appropriately reflected in a design efficiency measure. One delegation expressed support in exploring the introduction of onboard CO₂ capture in EEDI calculations following viability and feasibility analysis.

6.14 Several delegations stressed the need to further consider the scope of greenhouse gases to be regulated in future EEDI phases, in particular whether EEDI should take into account non-CO₂ greenhouse gases such as methane and nitrous oxide, whether it should cover well-to-wake emissions or only tank-to-wake emissions, and whether and how to refer to emission values to be defined in the LCA guidelines. Several delegations, while seeing merit in the inclusion of non-CO₂ greenhouse gases in the EEDI framework, expressed the view that it would be more effective to regulate these greenhouse gases through other IMO instruments. Regarding methane and ammonia slip, several delegations expressed the view that engine certification schemes as envisaged in the NO_x Technical Code should be used, rather than generic emission factors. One delegation highlighted the need to ensure that emission factors were aligned across IMO instruments.

6.15 One observer, in referring to document MEPC 79/6/3, supported the re-establishment of the Correspondence Group to include tank-to-wake CO₂ equivalent emissions on a 20-year basis (GWP20) in the EEDI framework, beginning with Phase 4, and develop draft timelines accordingly.

6.16 Following consideration, the Committee noted that there was no sufficient support for further considering the possible introduction of EEDI Phase 4 at this stage and consequently invited interested Member States and international organizations to submit further proposals to a future session.

6.17 The observer from ICS made an intervention, informing the Committee that, ahead of the 2023 survey identified in regulation 5.4.7 of MARPOL Annex VI for EEXI verification, ships were facing critical shortages in the delivery of power limitation devices which were a key compliance method for EEXI, and expressed their view that exemptions would be needed in such cases from flag Administrations.

Instructions to the Working Group on Air Pollution and Energy Efficiency

6.18 The Committee agreed to the following additional terms of reference for the Working Group on Air Pollution and Energy Efficiency, established under agenda item 5 on "Air pollution prevention":

- .1 consider the proposals in documents MEPC 76/6/9 (IACS), MEPC 77/6/2 and MEPC 77/INF.29 (Germany), MEPC 78/6/1 (India), MEPC 79/6/2 (ICS and RINA) and MEPC 79/7/10 (ICS) to amend *the 2018 Guidelines on the method of calculation of the Attained Energy Efficiency Design Index (EEDI) for new ships* (resolution MEPC.308(73), as amended), and for draft guidance in case of use of a power reserve as proposed in document MEPC 78/7/17 (Liberia), and advise the Committee accordingly;
- .2 consider proposed amendments to the *2014 Guidelines on the survey and certification of the Energy Efficiency Design Index (EEDI)* (resolution MEPC.254(67), as amended), taking into account documents MEPC 77/INF.29 (Germany) and MEPC 79/6 (ITTC), and advise the Committee accordingly;

- .3 consider amendments to the unified interpretation of regulations 2.2.18 and 22 of MARPOL Annex VI concerning the definition of new ships for new cruise passenger ships and mandatory reporting EEDI data, respectively, taking into account documents MEPC 76/6/3 (China) and MEPC 76/6/5 (CESA), and advise the Committee accordingly;
- .4 consider the proposed unified interpretation of appendix IX of MARPOL Annex VI to clarify the reporting of boil-off gas consumption in IMO DCS, as set out in document MEPC 79/7/5 (IACS) and advise the Committee accordingly; and
- .5 consider the proposed unified interpretation of regulations 8, 26.3.1 and 28 of MARPOL Annex VI as set out in document MEPC 79/7/24 (IACS) and advise the Committee accordingly.

Report of the Working Group on Air Pollution and Energy Efficiency

6.19 Having considered the relevant part of the report of the Working Group on Air Pollution and Energy Efficiency (MEPC 79/WP.9), the Committee took action as outlined below.

2018 Guidelines on the method of calculation of the Attained Energy Efficiency Design Index (EEDI) for new ships (resolution MEPC.308(73), as amended)

6.20 With regard to proposed amendments to the *2018 Guidelines on the method of calculation of the Attained Energy Efficiency Design Index (EEDI) for new ships* (resolution MEPC.308(73), as amended), the Committee noted that the Group had considered the following documents:

- .1 MEPC 79/6/2 (ICS and RINA), proposing to amend the equation in paragraph 2.2.5.2 of amendments to the *2018 Guidelines on the method of calculation of the Attained Energy Efficiency Design Index (EEDI) for new ships*, in order to reduce ambiguity concerning the maximum allowable power reduction;
- .2 MEPC 79/7/10 (ICS), proposing to amend paragraph 2.2.15 of the *2018 Guidelines on the method of calculation of the Attained Energy Efficiency Design Index (EEDI) for new ships*, to ensure consistency in approach with respect to how multiple load lines are treated; and bringing both EEDI and EEXI into alignment with the approach adopted by the CII rating mechanism;
- .3 MEPC 78/6/1 (India), proposing to amend paragraph 2.2.12.2 of the *2018 Guidelines on the method of calculation of the Attained Energy Efficiency Design Index (EEDI) for new ships*, in order to remove ambiguity concerning the application of the cubic correction factor for LNG carriers and gas carriers;
- .4 MEPC 78/7/17 (Liberia), proposing draft guidance for the Administration in case of use of a power reserve by unlimiting the shaft/engine power limitation to ensure a uniform and consistent approach among Administrations;

- .5 MEPC 77/6/2 (Germany), describing the revision of the shaft power limitation (ShaPoLi) concept; and containing a comparison with the corresponding concept for EEDI compliance after introduction of the shaft/engine power limitation for EEXI requirements;
- .6 MEPC 77/INF.29 (Germany), providing further information on document MEPC 77/6/2, including text of the proposed amendments to the *2018 Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI) for new ships* in relation to shaft/engine power limitation; and
- .7 MEPC 76/6/9 (IACS), proposing amendments to the *2018 Guidelines on the method of calculation of the Attained Energy Efficiency Design Index (EEDI) for new ships*, to add a C_F conversion factor between fuel consumption and CO₂ emissions to be applied for ethane fuel.

6.21 The Committee, having noted the discussion of the Group on the matter, adopted resolution MEPC.364(79) on *2022 Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI) for new ships*, set out in annex 9.

6.22 With regard to the proposals contained in documents MEPC 77/6/2 and MEPC 77/INF.29, the Committee noted the Group's general support for the inclusion of ShaPoLi and Engine Power Limitation in the EEDI framework, bearing in mind areas for further development, as described in paragraph 50 of the report of the Group (MEPC 79/WP.9). Consequently, the Committee invited interested Member States and international organizations to liaise with Germany to work informally intersessionally to prepare draft amendments to the EEDI Calculation Guidelines, and to develop draft guidelines on the shaft power limitation system to comply with the EEDI requirements and use of a power reserve, and any other instrument as appropriate, and submit concrete proposals to a future session.

6.23 The Committee noted that there had been no sufficient support in the Group for the draft guidance for Administration in case of use of a power reserve by unlimiting the shaft/engine power limitation system to comply with the EEXI as set out in document MEPC 78/7/17. Subsequently, the Committee invited interested Member States and international organizations to submit proposals on the use of a power reserve to a future session, taking into account experience gained from the implementation of EEXI regulations.

2014 Guidelines on the survey and certification of the Energy Efficiency Design Index (EEDI) (resolution MEPC.254(67), as amended)

6.24 With regard to proposed amendments to the *2014 Guidelines on the survey and certification of the Energy Efficiency Design Index (EEDI)* (resolution MEPC.254(67), as amended), the Committee noted that the Group had considered document MEPC 79/6 (ITTC), proposing amendments to the *2014 Guidelines on the survey and certification of the Energy Efficiency Design Index (EEDI)*, taking into account the 2021 update of ITTC Recommended Procedures and Guidelines concerning the determination and verification of the EEDI requirements; and document MEPC 77/INF.29 (Germany).

6.25 The Committee, having noted the Group's discussion, adopted resolution MEPC.365(79) on *2022 Guidelines on the survey and certification of the Energy Efficiency Design Index (EEDI)*, as set out in annex 10.

Unified interpretations of MARPOL Annex VI***Unified interpretation of regulations 2.2.18 and 22***

6.26 With regard to proposed amendments to the unified interpretation of regulations 2.2.18 and 22 of MARPOL Annex VI concerning the definition of new ships for new cruise passenger ships and mandatory reporting EEDI data, respectively, the Committee noted that the Group had considered the following documents:

- .1 MEPC 76/6/3 (China), seeking clarification on the requirements of EEDI data reporting as specified in regulation 22.3 of MARPOL Annex VI, as adopted by resolution MEPC.324(75); and proposing a unified interpretation to address this issue; and
- .2 MEPC 76/6/5 (CESA), highlighting the need to consider one unresolved issue regarding the application of EEDI Phase 3 requirements to cruise passenger ships having non-conventional propulsion; recommending expanding the time interval between contract and delivery date with a view to addressing problems related to the COVID-19 pandemic; and suggesting modifying the unified interpretations of MARPOL Annex VI accordingly.

6.27 The Committee, having note the Group's discussion, approved the updated unified interpretation clarifying the requirements of EEDI data reporting as specified in regulation 22.3 of MARPOL Annex VI, as set out in annex 8, and instructed the Secretariat to revise MEPC.1/Circ.795/Rev.6 accordingly, for dissemination as MEPC.1/Circ.795/Rev.7.

Unified interpretation of regulations 2, 27 and appendix IX

6.28 The Committee approved the unified interpretation clarifying the reporting of boil-off gas consumed on board ships in the IMO ship fuel oil consumption data-collection system (DCS), as specified in regulations 2, 27 and appendix IX of MARPOL Annex VI, as set out in annex 8, and instructed the Secretariat to revise MEPC.1/Circ.795/Rev.6 accordingly, for dissemination as MEPC.1/Circ.795/Rev.7.

Unified interpretation of regulations 8, 26 and 28

6.29 The Committee approved the unified interpretation clarifying several issues relating to the development and verification of SEEMP Part III and the issuance of the Statement of Compliance for the first year as specified in regulations 8, 26 and 28 of MARPOL Annex VI, as set out in annex 8, and instructed the Secretariat to revise MEPC.1/Circ.795/Rev.6 accordingly, for dissemination as MEPC.1/Circ.795/Rev.7.

7 REDUCTION OF GHG EMISSIONS FROM SHIPS**INTRODUCTION**

7.1 The Committee agreed to consider matters under this agenda item in the following order:

- .1 outcome of the thirteenth meeting of the Intersessional Working Group on Reduction of GHG Emissions from Ships (ISWG-GHG 13);
- .2 matters related to route-based actions to reduce GHG emissions from ships;
- .3 proposals related to onboard CO₂ capture;

- .4 matters related to the implementation of the short-term GHG reduction measure and its review; and
- .5 establishment of the Working Group on Reduction of GHG Emissions from Ships.

7.2 The Committee noted that documents MEPC 79/7/5 (IACS), MEPC 79/7/10 (ICS), MEPC 79/7/23 (paragraphs 20.3.2 and 20.9) (Brazil), MEPC 79/7/9 (EUROMOT), MEPC 79/7/24 (IACS) and MEPC 79/INF.25 (Republic of Korea) had been considered under agenda items 5 (Air pollution prevention) and 6 (Energy efficiency of ships) (see paragraphs 5.26 to 5.31 and 6.20 to 6.29).

UNFCCC matters

7.3 The Committee noted a statement by the representative of the UNFCCC Secretariat, set out in annex 16, providing a summary of the outcome of the United Nations Climate Change Conference (COP 27) held in November 2022 in Sharm El Sheikh, Egypt. The Committee also noted that the fifty-eighth session of the SBSTA Sub-Committee had been provisionally scheduled to take place from 5 to 15 June 2023 in Bonn, Germany, while COP 28 had been provisionally scheduled to take place from 30 November to 12 December 2023 in the United Arab Emirates.

7.4 The Committee also noted that the IMO Secretariat, led by the Secretary-General, had actively participated in COP 27 and that detailed information would be reported to MEPC 80.

7.5 The Committee requested the Secretariat to continue its well-established cooperation with the UNFCCC Secretariat and its attendance at relevant UNFCCC meetings, and to continue, as appropriate, to bring the outcome of the Organization's work to the attention of appropriate UNFCCC bodies and meetings.

Update on the operation of the IMO GHG TC-Trust Fund

7.6 The Committee noted that the IMO GHG TC-Trust Fund established by MEPC 74 had funded, inter alia, the comprehensive impact assessment of the short-term measure and a project to improve the availability of maritime transport costs data in the Pacific region. The Committee also noted that the Secretariat was in the process of identifying additional projects that could be funded through the Trust Fund to support the implementation of the Initial GHG Strategy as well as evidence-based decision-making in developing additional GHG reduction measures.

7.7 The Committee also noted the recently launched Future Fuels and Technology (FFT) Project, funded through the Voyage Together Trust Fund of the Republic of Korea, and implemented by the IMO Secretariat. The Committee further noted that the FFT project was designed to provide the latest technical information on availability and readiness of alternative fuels and technologies to the Committee to ensure full access to information for all, and that through the project, and with complementary funding from the IMO GHG TC-Trust Fund, in particular through a contribution by Japan, funded by the Nippon Foundation, the Secretariat was finalizing the procurement process for a "Study on the readiness and availability of low- and zero-carbon ship technology and marine fuels" towards 2050. The Committee noted that the results of the above-mentioned study might be submitted to MEPC 80.

7.8 The Committee noted with appreciation the pledged contributions to the GHG TC-Trust Fund by Canada (Can\$ 220,000), Denmark (US\$ 60,000), France (€50,000), Germany (€80,000) and the Netherlands (€10,000) and the funding for the Future Fuels Project through the Voyage Together Trust Fund by the Republic of Korea.

7.9 The Committee encouraged Member Governments and international organizations to consider making financial contributions to the GHG TC-Trust Fund to further support the Organization's efforts in supporting the global implementation of the Initial Strategy.

Outcome of ISWG-GHG 13

7.10 The Committee noted that the thirteenth meeting of the Intersessional Working Group on Reduction of GHG Emissions from Ships (ISWG-GHG 13) had been held from 5 to 9 December 2022, and that its report had been submitted as document MEPC 79/WP.5.

7.11 The Committee expressed appreciation to all delegates for their hard and very constructive work during ISWG-GHG 13, and to the Chair, Mr. Sveinung Oftedal (Norway), for very efficiently leading the Group through its dense and complex agenda.

7.12 The Committee also thanked the Secretariat for their hard work in preparing document MEPC 79/WP.5 over the weekend, especially the Conference Division, for translating the document.

General discussion on the outcome of ISWG-GHG 13

7.13 In conjunction with the consideration of the outcome of ISWG-GHG 13 (MEPC 79/WP.5) and the additional information provided orally by the Chair of the Working Group, the Committee had a general discussion with regard to the revision of the Initial Strategy, the development of a basket of mid-term GHG reduction measures, and impact assessments, including the revision of the Procedure for assessing impacts on States.

7.14 In the ensuing discussion, the following views, inter alia, were expressed:

With regard to the revision of the Initial Strategy:

- .1 increasing the level of ambition by 2050 to life cycle zero emissions was no longer a matter of choice but a matter of mandate;
- .2 if all Member States worked together to systematically address the tasks to develop technology and build infrastructure, the target of life cycle zero emissions could be achieved; however, when it came to developing countries, in particular SIDS and LDCs, a more flexible approach could be taken in the scope of utilization so that disproportionately negative impacts could be alleviated, and an equitable transition could be ensured;
- .3 the global shift towards a greener economy continued to be of utmost importance to mitigate the risks of climate change and other environmentally threatening conditions;
- .4 the status quo was not an option, because inaction only delayed decisions, reinforced the climate crisis and increased the economic consequences; there was ample evidence that the cost of inaction might well exceed the cost of action;

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- .5 since shipping assets had a long lifespan, beginning the transition immediately, with a clear long-term trajectory, would make the transition more gradual and less abrupt;
 - .6 given the latest IPCC reports, there was no choice but to aim for a gradual elimination of GHG emissions from maritime transport by 2050, taking into account the life cycle of fuels, if we wanted to stay in line with the objectives of the Paris Agreement;
 - .7 other organizations, such as ICAO, had adopted a collective long-term global aspirational goal of net zero carbon emissions by 2050, and this Organization could not remain isolated;
 - .8 the progress made so far demonstrated the collective commitment to brace up and face the challenges of climate change, which remained an existential threat to the global community;
 - .9 anything more than 1.5°C of temperature increase would deliver a global scenario where some countries and cultures perished; anything less than the highest possible ambition – which all States signed up for in the Paris Agreement – would see us pass 1.5°C in this decade;
 - .10 a draft MEPC resolution on zero emissions by 2050 should provide certainty to the industry, which should undergo the transition now, to the market, which should start delivering the fuels and technologies required by the industry, to the climate most vulnerable, who would pay an existential price if these levels of ambition were not achieved, and to the global community, demonstrating that shipping was committed to sectoral emission reduction commensurate with a 1.5°C agenda;
 - .11 terminology in the revised GHG Strategy should be aligned with the Paris Agreement – including a specific workforce focus in relation to just transition;
 - .12 it was promising to note that there was broad support for proposals to phase out GHG emissions no later than 2050, as well as support for interim checkpoints;
 - .13 the levels of ambition could not be revised in isolation, but a holistic approach would be needed to strike the right balance in the revised Strategy; the Working Group should also be allowed more time to discuss intermediate checkpoints, taking into account scientific evidence;
 - .14 the no-favourable treatment and the principle of Common But Differentiated Responsibilities and Respective Capabilities (CBDR-RC) were two sides of the same coin, which could harmoniously coexist in the guiding principles of the Strategy, complementing each other;
 - .15 the maritime sector must unequivocally be part of the solution in fighting climate change, and at the same time we must prevent distortions, we must make sure not to increase the gap that already existed between developed and developing countries, and we must preserve the credibility of this Organization;

- .16 it was recognized that international shipping was separate from Nationally Determined Contributions; therefore, it would be imperative for shipping to do its fair share in striving towards setting a decarbonization pathway that was aligned with keeping a 1.5°C increase within reach;
- .17 what was required was a significant strengthening of the ambition for 2050, and consideration of a net zero emissions goal by or around mid-century, in line with the vision of the Initial Strategy to phase out GHG emissions from international shipping "as soon as possible in this century";
- .18 intermediate checkpoint emissions targets in 2030 and 2040, including a new 5% alternative energy goal by 2030, would provide intermediate steps towards a refreshed goal for 2050, in line with what science required, as delayed climate action would bring greater costs to all economies;
- .19 it was important that the Strategy and the mid-term measures were developed in an aligned process; the Strategy to set the right level of ambition; and the measures to achieve those ambitions;
- .20 a strong and significant absolute 2030 target, such as halving emissions by 2030, was particularly important to agree to at this stage;
- .21 intermediate checkpoints before 2050 should be included, based on scientific data to make the transition more gradual, aiming for more predictability to the industry, taking into account the long lifespan of ships;
- .22 an essential part of the considerations was the need for financing for developing countries to transform port and bunkering infrastructure, and that financing for research and development duly include them;
- .23 the review of the Initial Strategy could not be limited to the levels of ambition, because just transition must also be effectively addressed and the principle of CBDR-RC should be effectively implemented in the Organization, taking into account the specific characteristics of shipping;
- .24 the holding of a workshop on the concepts of just transition and CBDR-RC to gain understanding on how they had been implemented in other forums was supported;
- .25 the revised Strategy should include the same level of ambition adopted in the Initial Strategy, since the operational and technical measure approved by the Committee and which had entered into force last month to meet the short-term objectives were designed based on this level of ambition; it would be risky to reinforce it without first knowing the results of the review of the measure implemented in the short term;
- .26 the reduction targets already agreed for 2030 in the Initial Strategy should be maintained and the focus should be put on strengthening the level of ambition for 2050;
- .27 possible new working arrangements, such as the establishment of a new sub-committee on reduction of GHG emissions from ships, would be required in the near future and for the next 20 years to support the increasing work on GHG emission reduction from the Organization;

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- .28 there was a growing coalition of more than 80 nations calling for a non-binding Advisory Opinion from the International Court of Justice to gain clarity on how existing international laws could be applied to strengthen action on climate change, protect people and the environment and save the Paris Agreement;
- .29 the revision of the Strategy must clarify not only a 1.5°C-aligned transition, but also an equitable one and the clearest way to do that would be to have a set of levels of ambition explicitly related to equitable transition objectives;
- .30 there remained concerns about the clarity of the governance of the Organization's work under the Strategy. Hence, the call for the Organization to consider governance principles, not just guiding principles, particularly the need for principles of highest possible ambition, and polluter pays principles to make sure that an equitable transition was designed;
- .31 an intermediate target of 80% must be established for 2040, to ensure consistency, and an effective and efficient transition;
- .32 SIDS and LDCs were already the countries most vulnerable to the adverse impacts of climate change, in a region which was already disproportionately impacted by the current effects of the climate crisis; the climate crisis was not just dangerous, it was an existential threat;
- .33 there should be levels of ambition both for environmental effectiveness and for equitable transition; these were two equally important components of the Organization's work, and it would improve the Strategy to give them equal status and level of specificity;
- .34 emissions from the shipping sector were significant, still increasing, and not on a 1.5°C-aligned pathway; but there had been remarkable momentum – from Governments and from non-State actors – in supporting the transition to green shipping; there had also been growing momentum on the production of zero-carbon and low-emission fuels, demonstrating that the transition was possible and already under way;
- .35 all of these targets should cover GHG emissions rather than CO₂ emissions alone – and the 2050 level of ambition should be zero emissions, rather than net zero, in order to send a strong signal to promote the use of zero-emission fuels instead of out-of-sector offsets;
- .36 all efforts to bring tangible evidence to the Organization supporting information-sharing on technology and fuel readiness should be commended, and would support shipping's transition to an emission free future as described in documents MEPC 79/INF.29 and MEPC 79/INF.30;
- .37 it would be an error to delay further the strong signalling required by the industry to allow for investment and decision-making in order to deliver a fleet that would meet the levels of ambition for the 2040s and beyond;
- .38 the Committee had sufficient analysis available to align the GHG reduction strategy with a 1.5°C target of zero emissions by 2050; therefore, further studies at this stage would be inconsistent with the Committee's approach to setting the levels of ambition in the Initial Strategy and contribute little added value ahead of MEPC 80 while also risking delay and disruption to the sector's ongoing phase-out of fossil fuels;

- .39 further analysis should be conducted on the feasibility of strengthening the levels of ambition in the revised Strategy in line with Paris Agreement goals;
- .40 industry was ready and willing to invest; this became clear in the numerous maritime events at the recent COP 27 in Egypt, and it was for us now at IMO to give the industry regulatory certainty by taking urgent and ambitious policy decisions;
- .41 there was a need to create a system based on three main pillars: 1) to phase out GHG emissions by no later than 2050 with intermediate checkpoints to keep the Paris Agreement temperature within reach; 2) to ensure the involvement of all stakeholders in the process; and 3) to ensure an equitable transition based on the principle that no one should be left behind;
- .42 the Committee would need to translate the principle of differentiation from CBDR-RC to an "IMO compatible" differentiation between States that would address the need for an equitable transition, leaving no one behind;
- .43 the holding of a webinar ahead of MEPC 80 on the legal principles to allow legal experts to set out the international principles relevant to the revised Strategy was supported;
- .44 calls for the inclusion of well-to-wake emissions assessments were appreciated and accounting for these emissions would be necessary in the future; however, a focus on operational emissions should be the key first step;
- .45 an additional Guiding Principle should also be included in the revised Strategy on the need for a broad approach to regulating safety of ships with new technologies and alternative fuels to support the achievement of the Organization's decarbonization goals as well as to effectively and efficiently coordinate between the Committees to ensure harmonization and implementation of the Strategy;
- .46 the various productive and successful projects undertaken by the Organization should be scaled up and replicated as early as possible as technical assistance would remain key to the Organization's decarbonization journey;
- .47 the proposal to allow a course correction for the next revision of the Strategy in 2028 should be supported, to consider the evolving fuels and technology as each country would conduct their own adaptation and technology transformation in the shipping sector within their own capacity;
- .48 the Committee should refer to just transition and include the ILO Just Transition Guidelines in the revised Strategy;
- .49 a process of just transition should be worked on, considering the development of capacities, the transfer of technology, intellectual property rights and effective implementation of the CBDR-RC principle; for all to move towards the goals to be achieved in the revised Strategy; and

- .50 the Clydebank Declaration was a timely and important initiative; however, green shipping corridors might result in disruption of global supply chains; therefore, should the Committee consider the development of criteria and guidelines for the establishment of green corridors, impacts on States of this initiative should be thoroughly assessed;

With regard to the development of a basket of mid-term GHG reduction measures:

- .51 technical or operational measures alone would not be sufficient to satisfactorily reduce GHG emissions from international shipping in view of the growth projections of world trade;
- .52 the funds raised should be used to mitigate the impacts of measures on developing countries, to support the decarbonization transition and to address the related challenges of developing countries, particularly SIDS and LDCs;
- .53 efforts should be accelerated to refine the selection of all proposed measures and further reduce differences between delegations;
- .54 a basket of measures combining the GHG fuel standard (GFS) with an economic instrument could be designed to facilitate the achievement of the objectives of the Strategy and raise sufficient and predictable revenues to stimulate a just and equitable transition, even without necessarily having to close the entire price gap between fossil fuels and sustainable fuels;
- .55 the creation of a fund in the Organization should enable action to limit disproportionately negative impacts on certain States, promote the availability of sustainable alternative fuels as well as create new opportunities;
- .56 initiatives aiming at promoting the establishment of voluntary green shipping corridors should be supported, in particular by amending resolutions MEPC.323(74) and MEPC.327(75), as proposed in document MEPC 79/7/14;
- .57 States could support the creation of such corridors, among other public-private initiatives, by bringing together developed and developing countries as well as the main actors of the entire value chain;
- .58 there were some concerns about the added value and impact of transforming the green shipping corridors initiative into a programme formally governed by the Organization, requiring among other things substantial governance and management capacity;
- .59 there would be a need to raise revenues to support developing countries, especially SIDS and LDCs, in areas such as technology R&D, technology transfer and relevant capacity-building projects;
- .60 economic measures should include dedicated funds and mechanisms for training and upskilling seafarers for a zero-carbon shipping industry and support training and education on safety;

- .61 a GFS would provide a predictable pathway of emission reductions in line with agreed ambition and an immediate start of the fuel transition, based on a full life cycle approach;
- .62 consideration should be given to whether the industry would be incentivized or penalized by the measures, as it was completely dependent on a supply chain that was beyond its control;
- .63 fund proposals should include: 1) a transparent administrative mechanism with adequate representation for developing countries; 2) equitable distribution of the fund respecting principles of CBDR-RC; 3) special focus to encourage R&D in developing countries; and 4) appropriate mechanisms ensuring that technology would be equitably facilitated to all Member States;
- .64 any measure or basket of measures adopted should be subject to "review cycles", in which their real impact on the achievement of the aspirational goals, as well as the "undesired effects", would be considered and addressed;
- .65 as the discussion regarding fuels was one central aspect of the measures to be adopted, the role of biofuels should and must be enhanced;
- .66 low-carbon alternatives to fossil-based marine fuels would require a combination of competitiveness, sustainability and availability;
- .67 choosing inadequate measures could have the unintended effects of not only not achieving the Organization goals, but also representing a time-costly detour, and in the meanwhile provoking palpable damage to livelihoods in many countries, particularly the developing countries which were most vulnerable to climate change;
- .68 the basket of mid-term GHG reduction measures could realistically be adopted by the Committee in 2024;
- .69 there was no doubt that support for a combined measure of a technical and economic nature was growing and was the only way to achieve an energy transition for maritime transport that would provide the world fleet with the necessary incentive and that would contribute to and guarantee a level playing field and a just transition;
- .70 the proposal for an ECTS was inclusive, providing for a fair and equitable transition, which was essential for any basket of measures adopted;
- .71 the "green corridors" initiative should not be considered in the basket of measures as it was a unilateral measure taken by some countries;
- .72 the initiative of green shipping corridors was considered to be a unilateral approach; it would have a significant impact on other States in their trade, and furthermore, it would risk undermining shipping's international nature and would likely cause market distortion; therefore this measure would require an extensive and thorough assessment and should not be reflected in the revised Strategy; instead the Organization should focus on multilateral measures and the compatibility of a unilateral measure such as green shipping corridors with the multilateral regime being questioned;

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- .73 the issue of the availability and timely deployment of alternative fuels and technologies and the development of port infrastructure worldwide should be addressed as a priority and should be complemented by the promotion of R&D, green technology transfer and capacity-building for developing countries, particularly SIDS and LDCs, so that the basket of measures adopted could be implemented by all and would minimize disruptions of markets and disproportionately negative impacts on States;
- .74 the current shortcomings of a GFS were its lack of flexibility in the early stages of the transition, and its inability to support an equitable transition;
- .75 the voluntary flexibility mechanism of the GFS proposed in document ISWG-GHG 13/4/7 weakened the certainty of this policy, and was unnecessary since the functions it was supposed to perform were instead met with a GHG levy;
- .76 regarding the feasibility of the GHG levy, the broad support from many Member States was a key ingredient to the feasibility of the measure; while regarding its effectiveness to deliver the levels of ambition of the strategy, the concept of a basket, in particular with a GFS, would reinforce each measure and ensure maximum effectiveness and long-run demand signal;
- .77 the Organization should hold a dedicated session on elements and definitions of an equitable transition in the context of international shipping, as well as a session on the disbursement mechanisms on the revenues obtained from a levy; and these sessions should be during ISWG-GHG 14;
- .78 the effectiveness of the basket of measures in providing actual GHG reductions and avoiding dangerous climate change was dependent on adopting a well-to-wake framing for all measures;
- .79 a levy on emissions would be the most convincing mid-term measure to address the needs of the Organization in enabling a 1.5-aligned strategy and equitable transition, and it could be further strengthened by acting in combination with a GFS;
- .80 onboard CO₂ capture and storage could be used to lower emissions in the near term;
- .81 it was demonstrated that there was no legal obstacle in the IMO Convention preventing Member States from adopting an economic measure through an amendment to MARPOL Annex VI, so the MARPOL Convention and its Annex VI would be the proper place to adopt an economic measure that could generate revenues;
- .82 the selection of the correct basket of measures should stem from the dual levels of ambition needed: temperature limits and equitable transition goals;
- .83 multiple options should need to be considered in achieving GHG reduction in shipping, and a balance should be found between encouraging first movers and supporting developing countries;
- .84 without technology transfer between the global North and global South, green shipping corridor initiatives would risk being exclusionary;

- .85 technologies which mitigated shipping emissions as soon as possible in the immediate term such as wind assistance, improved operational and energy efficiency measures should be supported, while also developing more stringent mid- and long-term measures;
- .86 a particular attention should be paid to the synergy of different elements, so as to develop effective, rational and feasible emission reduction pathway, while at the same time ensuring a level playing field and a fair transition;
- .87 the cost of any levy would inevitably be passed down the supply chain, in particular to SIDS and LDCs, which were already struggling;
- .88 if there were to be a market-based measure generating revenue, Pacific Islands would need to see an irrevocable commitment from the Organization on using shipping as a source of revenue to allocate significant money into the Pacific Resilience Fund to support maritime-related actions in the Pacific region while helping alleviate the effects and burden of the climate crisis caused by the actions of the developed world;
- .89 it should be acknowledged that MARPOL Annex VI was a technical instrument and was therefore not an appropriate instrument for any economic measure;
- .90 the Organization should avoid going beyond its mandate in regulating the shipping sector; therefore, the development of methodology and procedure for midterm measures should be for tank-to-wake GHG emissions with the exclusion of Black Carbon in the draft LCA guidelines; and
- .91 effort in the Organization should be harmonized with other initiatives of other transportation bodies, such as the Carbon Offsetting and Reduction Scheme for International Aviation by ICAO, especially on the methodology to measure the GHG reduction;

With regard to impact assessments, including the revision of the Procedure for assessing impacts on States:

- .92 ensuring availability of green energy sources required for the industry to meet its climate goals would be a challenge for some developing countries;
- .93 the implementation of IMO mid-term measures would also likely have a huge impact on developing countries' economies;
- .94 it was important to assess impacts as precisely as possible, in order to avoid and/or minimize as much as possible, in the design phase of the measures, their potential negative impacts on States; impact assessment and lessons-learned should remain essential parts of the process; therefore, the approval of the revised circular MEPC.1/Circ.885, which was a balanced result, should be supported;
- .95 measures should be developed which would meet the Organization's climate objectives, avoid or minimize the potential disproportionately negative impacts on States and would offer economic opportunities to developing States, in particular SIDS and LDCs;

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- .96 measures addressing the impacts of climate change required climate justice through targeted investment and financial actions because developing countries produced only a small proportion of greenhouse gas emissions and yet were among the most impacted by climate change; and there was a need to address the risk of seeing developing countries carrying a disproportionate share of the burden of the energy transition;
- .97 ensuring an equitable transition, including access to shipping services for all countries, access to technology and development of port infrastructure should be addressed alongside a just transition for the maritime workforce;
- .98 the revised Procedure on assessing impacts on States of candidate measures should be supported; additionally, a reference to MEPC.1/Circ.885/Rev.1 should be included under the section on Impact on States of the revised Strategy;
- .99 the basket of candidate measures should be assessed before adoption, and any disproportionately negative impact on developing States should be addressed in a fair, just and equitable manner that would guarantee that no one was left behind in the true sense; therefore, capacity-building, funding and transfer of greener technologies, including matters of intellectual property, should be addressed, as they were critical to transition from fossil fuel to greener shipping;
- .100 it would be important to address issues of transportation costs, potential distortion of trade, particularly for developing countries that were remote from their main markets and trading low-value cargo, because the costs of that transition would not be fully absorbed by ships, but would be passed down to the value chain, where the "end users" based in developing countries would be mostly affected;
- .101 the Committee should take the appropriate time to discuss in depth how to develop further GHG reduction measures and conduct adequate impact assessments of such measures to ensure that whatever goal set would actually be met with the adequate degree of integrity; and by preserving the CBDR-RC principle the Organization would also ensure that the transition to a more sustainable maritime activity would be inclusive and not exacerbate underdevelopment;
- .102 the measures to be adopted would be a crucial aspect of the Organization's climate change stance, because they might have significant and long-lasting impact on the maritime routes and the shipping activity itself; therefore, appropriate impact assessment – and the needed adjustments – would be at the very heart of this discussion, and should be an absolute prerequisite to any measure to be collectively adopted;
- .103 it should be possible to use standard global models to feed the Committee's discussions on impact assessment of measures, as well to find ways to address potential distortions before any definitive decision to be adopted; preliminary results of these studies had shown that impacts were not equal across the globe and as such, assessing and addressing impacts should be the Organization's course of action;

- .104 impact assessment efforts should not be excessively time-consuming, but they should provide the relevant information to enable making the best choices; however, the assessment should not be a sterile exercise, and avoiding disproportionately negative impacts on States should be a priority;
- .105 disproportionately negative impacts on States should be understood as undue distortions to the maritime flows and trade, their direct influence on economic growth and employment rates, as well as any perverse incentives that could have an effect opposite to the one intended;
- .106 it was crucial to mitigate disproportionately negative impacts on States of the measures adopted and applied through specific adjustments to address the identified negative impact according to the measure, as appropriate; and such specific adjustments might include different implementation schedules, exceptions, or others, as appropriate; thus, the measures to be approved should retain some flexibility, so as to be compatible with such adjustments;
- .107 the completion of the lessons-learned exercise of the comprehensive assessment of the short-term measure was welcomed, and MEPC.1/Circ.885/Rev.1 should allow for an assessment of the impact of future measures with greater guarantees regarding the implications that they might have in developing States, in particular SIDS and LDCs;
- .108 the revised procedure to assess impacts on States was a big step in the right direction; equally important was technical cooperation and capacity-building to allow all States to realize the tremendous opportunities that decarbonization of the sector would bring about; the Initial Strategy should therefore be revised in a holistic manner to account for these factors;
- .109 Indigenous knowledge should be considered and included when assessing impacts, whether from climate change on communities or economic impacts from measures to decarbonize the sector, where Indigenous knowledge could bring an important and needed approach to assessing impacts and developing lasting solutions;
- .110 with regard to the possibility of including Indigenous knowledge in submissions by Member States and international organizations in the context of impact assessments, all other relevant sectors or communities of a State could also be considered and included in those submissions;
- .111 the comprehensive impact assessment of the short-term measures highlighted significant gaps that should be addressed to ensure inclusivity and that the Organization would leave no one behind, especially the developing economies, including SIDS and LDCs; hence, the constraints of developing countries, especially SIDS and LDCs, would necessitate the much-needed technological cooperation and financial support;
- .112 the agreed procedure would be essential to assess the negative impacts on States with a double objective: firstly, so that when shaping measures in a basket of measures, negative impact on developing countries, especially SIDS and LDCs, was avoided or minimized; secondly, to address negative impacts once a measure entered into force, to review it and, if necessary, adjust it, or provide compensation to negatively impacted States;

- .113 serious concerns were expressed with the proposals to adopt a mandatory universal tax with a notable emphasis on its revenue potential; a tax would not be an "equitable" measure, because it would carry a high potential for the cost to be transferred to the freight price, and thus to the primary producer – many of them small and medium-sized producers – or to the consumer, negatively impacting exporting or importing developing countries distant from their markets; making them actually bear the cost of the measure; in that case, the polluter would not pay, but it would be developing countries distant from their markets who would pay;
- .114 a comprehensive impact assessment should be carried out before adoption for the basket of measures as a whole and not for individual measures; disproportionately negative impacts should be addressed; and the adoption of compensation mechanisms should be explored to ensure a just and equitable transition;
- .115 UNCTAD should be identified as the right body to undertake the comprehensive impact assessment of the basket of measures;
- .116 impacts on Pacific islands would be real and should be accommodated;
- .117 knowledge sharing would be paramount and the Organization and its initiatives such as IMO CARES would facilitate this in the future;
- .118 to avoid negative impacts on developing countries, the impact assessment should be carried out in parallel with the development of the measures, and if the impact assessment showed that the mid-term measures would result in negative impacts on the shipping industry and developing countries, then the design and settings of the measures would need to be adjusted;
- .119 it would be necessary to minimize and compensate the inevitable negative impacts on States; therefore it would be important to embody the CBDR-RC principle in the development of measures; and
- .120 the way of life and culture of SIDS had thus far been held to ransom by an unwillingness to act, this despite the ability to do so; therefore, action would need to be taken but not through imposed measures that could disproportionately impact on the structure, fabric and sustainability of a remote island and its society that was so dependent on shipping.

7.15 Having considered the report of ISWG-GHG 13 (MEPC 79/WP.5), the Committee approved it in general and took action, as described below.

Intervention by the Secretary-General on the outcome of ISWG-GHG 13

7.16 The Committee noted the intervention by the Secretary-General with regard to the outcome of ISWG-GHG 13. In his intervention the Secretary-General encouraged the Committee to continue the important work on the revision of the GHG Strategy, the development of mid-term GHG reduction measures, and impact assessments in line with the Work plan for the development of mid-term measures.

7.17 The Secretary-General thanked the Intersessional GHG Working Group and its Chair for the good progress, in particular the finalization of the Revised procedure for assessing impacts on States, in the well-known IMO spirit of cooperation.

7.18 The Secretary-General shared the view of many delegations, that any increased level of ambitions, such as an aspirational 2050 goal of phasing out GHG emissions from shipping, could only be achieved through the implementation of a basket of measures containing both technical and economical elements which would enable a smooth energy transition and providing much-needed support for developing States, in particular SIDS and LDCs. He was also of the view that the revised impact assessment procedure would be an essential tool to ensure that disproportionate negative impacts would be addressed before the adoption of mid-term measures.

7.19 In concluding his remarks the Secretary-General reassured the Committee that he would spare no effort to support this process, including the implementation of various projects to assist developing States, as well as organizing the comprehensive impact assessment once requested by the Committee, and that he was very optimistic that IMO would once again be able to showcase that "shipping can deliver", that "IMO cares", that "we will leave no one behind" and that "it was time for IMO to make history".

Personal observations by the Chair

7.20 The Committee noted the personal observations by the Chair on the revision of the Initial Strategy, the development of mid-term measures and impact assessments, in which he:

- .1 reiterated what the Secretary-General had mentioned in his opening speech, namely that "MEPC 80 in July 2023 would be a historic moment for IMO to showcase to the world its determined maritime decarbonization strategy";
- .2 expressed conviction that there was full support from the Committee to continue the important work on the revision of the GHG Strategy, the development of mid-term GHG reduction measures, and impact assessments in line with the Work plan for the development of mid-term measures and the Committee's earlier commitments;
- .3 with regard to impact assessments:
 - .1 noted that all of those who spoke endorsed the Group's productive work on the revision of the Procedure for assessing impacts on States also taking into account the lessons-learned exercise of the comprehensive impact assessment of the short-term measure; and
 - .2 noted that the Organization was now well prepared to initiate a comprehensive impact assessment of the basket of mid-term measures;
- .4 with regard to the basket of mid-term measures:
 - .1 noted that the Committee was committed to continue the important work on the development of mid-term IMO GHG reduction measures in accordance with the timelines set out in the work plan which foresaw that the Committee should identify the priority measure(s) to be further developed by MEPC 80;
 - .2 noted that also within the Committee there was convergence on developing a basket of measures which would comprise both of a technical element regulating the GHG intensity of marine fuels and of an economic element;

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- .3 encouraged the proponents of the various candidate measures to continue their constructive cooperation with a view to, as far as possible, combining and developing the technical and economic elements in parallel within a basket of candidate mid-term GHG reduction measures while also further enhancing accompanying impact assessments which may inform possible adjustments in the design of the candidate measures;
- .4 noted that in this regard, many delegations had underlined the importance of further discussions on how to redistribute the revenues generated under an IMO economic measure, to support developing States, in particular SIDS and LDCs, with fuel production and port infrastructure development, further R&D, technology cooperation, capacity-building but also the training of seafarers and reskilling the workforce, and all within the broader context of a "just and equitable" transition.
- .5 with regard to the revision of the Strategy, noted that:
- .1 on the levels of ambition in the revised Strategy, for 2050 and for possible intermediate checkpoints, there were for obvious reasons, divergent views;
 - .2 regardless, that there was an increasing support to work towards a 2050 goal to phase out GHG emissions from international shipping while also stressing the need to continue to assess global fuel and technology availability and ensuring the necessary support for developing States, in particular SIDS and LDCs, in this transition; and
 - .3 also on the revision of the Strategy, the Intersessional Working Group had provided the Committee a concrete way forward to continue the work, namely by means of the working document annexed to the report of the Group; and
 - .4 everyone recognized that this was very important work in progress; and
- .6 with regard to the proposed resolution in document MEPC 79/7/11 on zero emissions no later than 2050, noted some support for adopting such a resolution at this session, while other delegations supported the intention behind the proposal but in view of the ongoing discussions on the vision and levels of ambition in the revised Strategy indicated their preference to consider the proposed level of ambition in the broader context of the revision.

Reaffirmation of the Committee's commitment

7.21 Following the Committee's general discussion on the outcome of ISWG-GHG 13 in relation to the revision of the Initial Strategy, the development of mid-term measures and impact assessments, including the revision of the Procedure for assessing impacts on States of candidate measures, the Committee agreed to reaffirm its commitment to:

- .1 adopt a revised IMO GHG Strategy in all its elements, including with a strengthened level of ambition by MEPC 80;
- .2 continue its work on identifying the candidate GHG reduction measures to be developed in priority as part of a basket of measures consisting of both technical and economic elements by MEPC 80 in accordance with the work plan; and
- .3 undertake a comprehensive impact assessment of the basket of candidate measures ahead of their adoption in accordance with the work plan and the revised Procedure for assessing impacts on States.

7.22 As requested, the statements made by the delegations of Argentina, Belgium, China, the Cook Islands, Ecuador, Fiji, Ghana, India, Indonesia, Ireland, Italy, Kenya, the Marshall Islands, Mexico, the Netherlands, Saudi Arabia, Sierra Leone, South Africa, Spain, Tonga, Tuvalu, the United Arab Emirates, the United Kingdom, Vanuatu and the Bolivarian Republic of Venezuela and the observer from ITF are set out in annex 16.

7.23 The delegation of the Marshall Islands expressed its disappointment with the fact that the Committee did not support the adoption of the proposed resolution in document MEPC 79/7/11 on zero emissions no later than 2050 at this session; underlining the urgency of taking climate action; recalling its disappointment with the low levels of ambition agreed in the Initial Strategy; and stating its disappointment that the Committee again had not taken decisive action at this session.

7.24 Having considered the report of ISWG-GHG 13 (MEPC 79/WP.5), the Committee approved it in general and took action, as described below.

Assessments of impacts on States

7.25 The Committee noted the discussion by ISWG-GHG 13 on the finalization of the lessons-learned exercise of the comprehensive impact assessment of the short-term measure, and of the review of the Procedure for assessing impacts on States of candidate measures (MEPC.1/Circ.885).

7.26 The Committee also noted that the Group had finalized its lessons-learned exercise of the comprehensive impact assessment of the short-term GHG reduction measure and the review of the Procedure for assessing impacts on States of candidate measures.

7.27 Following consideration, the Committee approved MEPC.1/Circ.885/Rev.1 on *Revised procedure for assessing impacts on States of candidate measures*.

7.28 Accordingly, the Committee further noted that the Group had completed the consideration of concrete proposals on how to keep the impacts of the short-term GHG reduction measure under review while also noting that this issue might be added on the Group's agenda in the future when needed.

Revision of the Initial Strategy

7.29 The Committee noted that the following nine documents submitted to this session on the revision of the Initial Strategy had already been considered by ISWG-GHG 13:

- .1 MEPC 79/7/3 (INTERTANKO), providing an analysis of fuel options available to meet the levels of ambition in the Initial Strategy; and proposing that the Committee take the facts and data in the analysis into account when deciding on mid-term and long-term GHG reduction measures for shipping and decide on any new levels of ambition and targeted GHG deadlines based upon a symbiotic balance between political desires and ambitions with the actual reality of the needs to develop and produce renewable energy sources for shipping;
- .2 MEPC 79/7/8 (India), proposing views and a way forward for the GHG reduction strategy to be phased in progressively to ensure that the transition is smooth, achievable and inclusive without leaving anyone behind; suggesting focusing on achieving immediate targets based on a new horizon of 2030, while continuing its efforts to strengthen the existing targets for 2050 and to aim for complete decarbonization of shipping on an early date validated by a clear pathway to achieve it; and further suggesting that the revised IMO GHG Strategy should consider the achievements and impacts of the short-term measure implemented to date and going into 2026 while focusing on targets to ensure that zero carbon/net zero carbon fuel occupy 5% of the fuel mix by energy content by 2030;
- .3 MEPC 79/7/11 (Marshall Islands et al.), proposing that the Committee recognize that international maritime transport must reach zero GHG emissions no later than 2050 based on the findings of the recent IPCC reports and other recent scientific research; and in particular inviting the Committee to adopt a draft MEPC resolution on zero emission shipping by 2050;
- .4 MEPC 79/7/17 (Norway, Republic of Korea and WSC), proposing strengthened levels of ambition in the revised IMO GHG Strategy; positing that zero emissions from international shipping needs to be achieved by 2050; further suggesting that the revised Strategy should assess strengthening of the existing 2030 ambition, and establishing levels of ambitions for every five years in order to be certain that the pathway to reduce GHG emissions is sufficient for meeting the ambition in 2050; also presenting the benefits of advancing the phase-out of GHG emissions from ships through a green corridors approach; and suggesting text for inclusion in the revised Strategy proposing an IMO green corridors programme;
- .5 MEPC 79/7/19 (IAPH), providing key considerations from the ports' perspective when addressing proposals for mid- and long-term measures, the revision of the Initial Strategy, and the essential topic of ensuring a just and equitable transition; stressing the need for an early adoption of a global market-based measure (MBM) and of an ambitious revision of the Initial Strategy by MEPC 80 towards the decarbonization of shipping by 2050 and the setting of intermediate targets for 2030 and 2040; further advocating that the strategic allocation of MBM generated revenues is essential to drive the decarbonization of the maritime industry in a just and equitable manner;

- .6 MEPC 79/7/20 (Greenpeace et al.), outlining the recent scientific evidence on the risks of triggering cascading climate tipping points from climate heating and making recommendations for urgent near-term actions that will contribute to limiting global heating below 1.5°C to mitigate these risks; requesting to support full decarbonization of shipping well before 2050, to making deep cuts to Black Carbon emissions from shipping in and near the Arctic, raising the level of ambition in the CII to 6% or 7% per annum; and ensuring participation of climate vulnerable nations and Indigenous communities in the just and equitable green transition, and enhancing collaboration between UN agencies and between the UN and other national and international agencies;
- .7 MEPC 79/7/25 (ILO), enumerating several considerations that will be necessary to discuss in the revised IMO GHG Strategy to ensure a just transition to low-carbon shipping; proposing to consider the ILO Just Transition Guidelines so the Strategy reflects the three pillars of sustainability: economic, environmental and social, further recommending referring to just transition in the revised IMO GHG Strategy, in particular under the Guiding Principles, Impact on States, Barriers and Supportive Measures, Capacity-building and Technical Cooperation sections;
- .8 MEPC 79/INF.29 (United Kingdom), presenting the findings from a study commissioned by the United Kingdom presenting an evidence-based approach towards a 1.5°C-aligned level of ambition for the international maritime sector; intending to support the review of the Initial IMO GHG Strategy; and highlighting that the sooner sustained reductions in GHG emissions would begin, the smoother and more cost-effective the transition to zero-emission shipping shall be; and
- .9 MEPC 79/INF.30 (United Kingdom), presenting the findings from a study commissioned by the United Kingdom providing new evidence for facilitating the adoption of a 1.5°C-aligned revised IMO GHG Strategy at MEPC 80; and reviewing existing evidence on maritime emissions reduction pathways and the cost of achieving specific levels of ambition and potential impacts on States.

7.30 The Committee noted the progress made by the Group in the development of the draft revised Strategy, in particular the development of a working document (MEPC 79/WP.5, annex 2) to be further reviewed and developed by the Group during its future meetings.

Further consideration of a basket of mid-term GHG reduction measures in the context of Phase II of the Work plan for the development of mid- and long-term measures

7.31 The Committee noted the following four documents submitted to this session on the further consideration of a basket of mid-term GHG reduction measures which had already been considered by ISWG-GHG 13:

- .1 MEPC 79/7 (WSC), examining the principal mid-term measures under consideration by the Committee by identifying the cross-cutting issues relevant to numerous proposals such as necessity of increased investments in the production and supply of alternative fuels, well-to-wake life cycle approach (LCA), structure for an equitable transition and streamlined implementation; suggesting modifying the GFS proposal to include a limited set of steps and establishing dates based on projected fuel and technology

production time frames also suggesting building on existing initiatives and developing an IMO green corridors programme; and suggesting to consider a benchmarking approach not based on the CII but using an LCA-based GHG intensity metric;

- .2 MEPC 79/7/3 (INTERTANKO), providing an analysis of fuel options available to meet the levels of ambition in the Initial Strategy; and proposing that the Committee take the facts and data in the analysis into account when deciding on mid-term and long-term GHG reduction measures for shipping and decide on any new levels of ambition and targeted GHG deadlines based upon a symbiotic balance between political desires and ambitions with the actual reality of the needs to develop and produce renewable energy sources for shipping;
- .3 MEPC 79/7/19 (IAPH), providing key considerations from the ports' perspective when addressing proposals for mid- and long-term measures, the revision of the Initial Strategy, and the essential topic of ensuring a just and equitable transition; stressing the need for an early adoption of a global market-based measure (MBM) and of an ambitious revision of the Initial Strategy by MEPC 80 towards the decarbonization of shipping by 2050 and the setting of intermediate targets for 2030 and 2040; further advocating that the strategic allocation of MBM generated revenues is essential to drive the decarbonization of the maritime industry in a just and equitable manner; and
- .4 MEPC 79/INF.26 (Republic of Korea), providing information on a newly developed fuel supply system and re-liquefaction system for LPG/ammonia carrier to implement IMO's GHG reduction strategy.

7.32 The Committee noted the progress made by the Group in the consideration of mid-term GHG reduction measures and that the Group had:

- .1 welcomed the convergence on the development of a basket of measures consisting of both technical and economic elements with a view to identifying which measure(s) to develop further in priority by MEPC 80 in line with the work plan;
- .2 noted the increasing support for a possible combination of a technical element and an economic element within a basket of measures, which could effectively promote the energy transition of shipping and provide the world fleet the needed incentive while contributing and ensuring a level playing field and a just and equitable transition while also stressing the various outstanding concerns that should be addressed before the end of Phase II of the work plan; and
- .3 stressed that the impacts on States of a measure/combination of measures should be assessed and taken into account as appropriate before adoption of the measure(s), paying particular attention to the needs of developing countries, especially SIDS and LDCs, and that disproportionately negative impacts should be assessed and addressed, as appropriate, in accordance with the Revised procedure for assessing impacts assessment on States of candidate measures.

Draft guidelines on life cycle GHG intensity of marine fuels and the use of biofuels

7.33 The Committee noted the following six documents submitted to this session on the development of draft guidelines on life cycle GHG intensity of marine fuels (LCA guidelines) and the use of biofuels, which had already been considered by ISWG-GHG 13:

- .1 MEPC 79/7/12 (China et al.), providing the interim report of the Correspondence Group on Marine Fuel Life Cycle GHG Analysis established by MEPC 78; and suggesting that the Committee consider progress made by the Group on the initial list of fuel pathways developed, provide any further guidance to facilitate finalizing the list and relax the deadline for submission of the final report by the nine-week document deadline of MEPC 80;
- .2 MEPC 79/7/18 (India), highlighting the need to recognize the conversion factor (C_F) between fuel consumption and CO₂ emissions for biofuels and its blends based on life cycle assessment, by supporting the finalization and adoption of LCA guidelines at MEPC 80 and proposing that the Committee consider and adopt at the same time a resolution stating that any biofuel manufactured from recycled sustainable biomass or seed oil from tree species that do not compete for food and fodder and that is certified as a sustainable fuel as per the LCA guidelines, be assigned zero (0) CO₂ equivalent value for use in IMO DCS and CII regulations;
- .3 MEPC 79/7/23 (Brazil), providing information on biofuels as an alternative to support IMO GHG reduction goals, addressing biofuels' contribution to achieving the ambition aimed at mitigating GHG emissions from international shipping by the Organization Life Cycle Assessment methodology, biofuels certification, regional methodological differences and initiatives for the use of biofuels by the maritime transport; inviting the Committee to consider biofuels as one of the alternatives for shipping to achieve GHG goals, to develop a system for the international accreditation of biofuels certification, and to instruct the Correspondence Group on Marine Fuel Life Cycle GHG Analysis to take the information in the document into consideration;
- .4 MEPC 79/INF.16 (RINA), providing an overview of onboard tank-to-wake methane emission sources, including types of methane slip, slip differences between different baseline engine technologies and estimates of methane slip emission levels for different engine technologies; introducing currently known methods to reduce methane slip together with an estimate of potential GHG reduction levels for each combination of engine technology and methane reduction method; considering measures to minimize slip resulting from operations; and stressing that the potential to reduce upstream well-to-tank fugitive emissions needs to be fully understood as part of the development of the Life Cycle Analysis for properly assessing the viability of such alternative fuel pathways;
- .5 MEPC 79/INF.22 (Brazil), offering an overview of the potential of sustainable production of bioenergy in Brazil by presenting information regarding biofuels production, regulatory frameworks and land use; highlighting the potential for bioenergy production without harming food crops, climatic conditions in tropical latitudes, and the characteristics of the existing soils; and depicting the need to adopt regional systems aimed at assessing the life cycle of biofuels in view of the specificities of production and logistics existing in different continents; and

- .6 MEPC 79/INF.31 (Republic of Korea), providing a literature review and analysis of LCA studies on marine fuels aiming at facilitating the development of life cycle GHG/carbon intensity guidelines for marine fuels; while seeking a better way to guide future LCA policy development as well as decision-making.

7.34 With regard to the development of the draft LCA guidelines and biofuels, the Committee:

- .1 noted the progress made in the development of Marine Fuel Life Cycle Guidelines by the Correspondence Group as set out in document MEPC 79/7/12, including the initial list of fuel pathways, with a view to finalization and adoption of the guidelines by MEPC 80, as planned;

- .2 approved the updated terms of reference of the Correspondence Group on Marine Fuel Life Cycle GHG Analysis, under the coordination of China, Japan and the European Commission* as set out below:

Using annex 1 to document ISWG-GHG 11/2/3 as the basis, also taking into account relevant documents submitted to ISWG-GHG 11, documents MEPC 78/7/13, MEPC 78/7/19, MEPC 78/INF.25, ISWG-GHG 13/6, MEPC 79/7/23, MEPC 79/INF.16, MEPC 79/INF.22, MEPC 79/INF.31, and MEPC 78/7/28, and decisions and comments made at ISWG-GHG 11 and MEPC 78:

- .1 further develop the draft guidelines on life cycle GHG intensity of marine fuels (draft LCA guidelines), with a view to finalizing the draft guidelines at MEPC 80, and in doing so:
- .1 identify main initial fuel production pathways and feedstocks for inclusion in the draft LCA guidelines, and how they could be subcategorized and further specified;
 - .2 further consider sustainability criteria issues and further develop the Fuel Life Cycle Label, taking into account the fuels identified in sub-paragraph 1.1;
 - .3 develop methodologies that allow for the calculation of well-to-tank, tank-to-wake and entire well-to-wake GHG emissions default values for the fuels identified in sub-paragraph 1.1;

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- .4 develop procedures that allow for the continuous review of well-to-tank, tank-to-wake and entire well-to-wake GHG emissions default values for the fuels identified in sub-paragraph 1.1; and
 - .5 develop guidance for third-party verification and certification schemes;
 - .2 review the overall structure, format and consistency of the draft LCA guidelines; and
 - .3 submit a final report to MEPC 80.
- .3 agreed to relax the deadline for submission of the final report of the Correspondence Group on Marine Fuel Life Cycle GHG Analysis by the nine-week document deadline of MEPC 80 (Friday, 28 April 2023); and
- .4 invited interested Member States and international organizations to consult with the delegation of India in their further consideration of developing a draft MEPC resolution on the uptake of sustainable biofuels for shipping at MEPC 80.

7.35 In this regard, the delegation of India invited the Committee to consider whether the LCA guidelines could be adopted in conjunction with the possible MEPC resolution on the uptake of sustainable biofuels for shipping at MEPC 80.

Revision of the IMO Ship Fuel Oil Consumption Data-Collection System (IMO DCS)

7.36 With regard to the further revision of IMO DCS, the Committee:

- .1 noted the broad support for the proposal in document ISWG-GHG 13/7 (Austria et al.) to include data on transport work, the possible use of innovative technologies and on the level of granularity of reported data, as well as the Group's intention to further work on the proposal;
- .2 invited interested Member States and international organizations to further investigate technical and practical implications on the introduction of the proposal;
- .3 instructed ISWG-GHG 14 to further consider the draft amendments to appendix IX of MARPOL Annex VI, using annex 1 to document ISWG-GHG 13/7 as a basis, and any supporting guidelines, as appropriate, taking into account comments and concerns expressed during ISWG-GHG 13;
- .4 noted the information and proposals set out in document ISWG-GHG 13/7 regarding rounding, anonymization and accessibility of reported DCS data; and
- .5 invited the co-sponsors of document ISWG-GHG 13/7 to consult with those delegations that had expressed concerns to work on a possible revised proposal with a view to submission to a future session.

Matters related to route-based actions to reduce GHG emissions from ships

7.37 In considering matters related to route-based actions to reduce GHG emissions from ships, the Committee had for its consideration document MEPC 79/7/14 (Australia et al.), proposing amendments to resolution MEPC.323(74) on *Invitation to Member States to encourage voluntary cooperation between the port and shipping sectors to contribute to reducing GHG emissions from ships* and to resolution MEPC.327(75) on *Encouragement of Member States to develop and submit voluntary National Action Plans (NAPs) to address GHG emissions from ships*, with a view to including references to route-based actions or "Green Shipping Corridors" as a useful voluntary tool in facilitating and incentivizing the reduction of GHG emissions from ships.

7.38 In the ensuing discussion, many delegations supported the proposed amendments to resolutions MEPC.323(74) and MEPC.327(75) regarding voluntary "route-based action" or "green maritime corridors", emphasizing the positive effects in, inter alia, further supporting the fuel transition by providing small-scale test-beds to gain more safety and operational experience with low- and zero-carbon fuels which may also support the development of relevant IMO standards; creating additional incentives supporting the uptake of low- and zero-carbon technology and fuels; addressing existing commercial and technical barriers and supporting technology deployment and market-readiness; encouraging public-private partnerships and cooperation across the entire maritime value chain; and by bringing together developed and developing countries, including by means of additional IMO capacity-building or technology cooperation initiatives supporting route-based action as well as their renewable energy production potential.

7.39 Some of these delegations also referred to existing voluntary initiatives such as the Clydebank Declaration for Green Shipping Corridors and the Green Shipping Challenges which had accelerated the development of green maritime corridors and the relevance of including these concepts in a voluntary IMO instrument to further support their development, including by means of IMO capacity-building initiatives and projects.

7.40 Several of these delegations, in stressing their support for including reference to route-based action in voluntary IMO instruments, emphasized that they could not support the inclusion of a possible programme on the development of green maritime corridors within the revised Strategy, either as a level of ambition or as a candidate measure.

7.41 One delegation, in welcoming in principle the inclusion of route-based action in the voluntary resolutions, emphasized the importance of underlining that the voluntary route-based action as envisaged in the resolutions should not go beyond the GHG reduction targets set out in IMO's GHG reduction measures. Another delegation, also seeing merit in the proposal, stressed that the development of voluntary green maritime corridors should not lead to distortions in commerce or trade law.

7.42 Some delegations, while expressing appreciation to the proposal, highlighted that the green corridor concept, including some of the terminology used, like a "green" port or "green" fuels, was still under development and therefore considered it to be premature and could not support, including any reference to route-based action in an IMO instrument, even of a voluntary nature, as it might lead to possible discrimination, could favour bilateral action over multilateral regulation by the Organization, and that possible impacts would have to be assessed first.

7.43 Following consideration, the Committee, noting the broad support for the proposal, agreed to refer the draft amendments to resolutions MEPC.323(74) and MEPC.327(75), as set out in annex 1 and 2 to document MEPC 79/7/14 to the Working Group on Reduction of GHG Emissions from Ships for finalization with a view to adoption at this session, taking into account comments made during the Committee's consideration of the above-mentioned document.

7.44 As requested, the statement by the observer from INTERCARGO is set out in annex 16.

Proposals related to onboard CO₂ capture

7.45 The Committee recalled that MEPC 78 had considered document MEPC 76/7/17 (Republic of Korea) and, while recognizing that onboard CO₂ capture might play a role in reducing GHG emissions from international shipping, that it had noted diverging views on the proposal, in particular with regard to various technical and regulatory aspects.

7.46 The Committee also recalled that MEPC 78, given the interest in further consideration of the concept of onboard CO₂ capture, had invited interested Member States and international organizations to submit further information and concrete proposals to future sessions (MEPC 78/17, paragraph 7.132).

7.47 The Committee had for its consideration the following documents related to onboard CO₂ capture:

- .1 MEPC 79/7/4 (Liberia and ICS), proposing to consider the CO₂ reduction obtained from carbon capture technologies and to regulate them in the EEDI/EEXI and CII frameworks; in particular, proposing that the CO₂ reduction related to the use of Carbon Capture and Storage (CCS) and Carbon Capture, Use and Storage (CCUS), independently from the technology applied, would be considered in the calculation of the Attained EEDI/EEXI and Attained CII; also providing a draft circular on the sample format for the information to be included in a proposed "CO₂ Receipt Note"; proposing draft amendments to the 2018 EEDI Calculation Guidelines and the 2022 CII Guidelines (G1); and suggesting that the Committee should establish a correspondence group on CCS/CCUS with the suggested draft terms of reference;
- .2 MEPC 79/7/6 (China), proposing amendments to the 2018 EEDI Calculation Guidelines to incorporate the positive emission reduction effects by the installation of a carbon capture system for ship exhaust gas (CCSE), which mainly consists of adding the CO₂ capture rate after installation of CCSE on board the ship and its correction factor, and additional CO₂ emission in unit time due to installation of CCSE in the EEDI formula;
- .3 MEPC 79/7/7 (China), proposing amendments to *the 2014 EEDI Survey and Certification Guidelines* taking into account the updated EEDI Calculation Guidelines as proposed in document MEPC 79/7/6 (China), which would incorporate the positive emission reduction effects by the installation of a CCSE, to supplement the existing EEDI Survey and Certification Guidelines to adapt to the installation of CCSE on board the ship; and to amend the preliminary verification of the attained EEDI at the design stage and final verification of the attained EEDI at sea trial;

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- .4 MEPC 79/7/16 (Norway), suggesting considering how CCS could reduce GHG emissions from shipping; also suggesting what needed to be addressed by the Organization in relation to accounting, verification and certification to enable the use of carbon capture technology on ships and ensure responsible handling and storage of the captured carbon dioxide; and further suggesting that the Committee consider the use of CCS technology in shipping within a dedicated work stream with suggested draft terms of reference;
 - .5 MEPC 79/7/22 (Republic of Korea), proposing to include CO₂ reduction of onboard CO₂ capture systems in the IMO GHG regulatory framework, including EEDI, EEXI and CII; also suggesting that this would remove regulatory barriers to innovative technology and provide a level playing field and cost-effective opportunity for the decarbonization of the shipping industry; and
 - .6 MEPC 79/INF.27 (Republic of Korea), introducing recent developments of a CO₂ capture system in the Republic of Korea; illustrating the composition of a CO₂ capture system divided into three distinct systems – exhaust gas pretreatment system, CO₂ absorption system and CO₂ sequestration system; and providing information about various test projects and including a road map of a research project by a government-funded research institute for onboard CO₂ capturing system to be concluded by 2026.

7.48 Owing to time constraints, the Committee did not consider in detail the proposals contained in the above-mentioned six documents and instead focused on possible ways of how to progress the consideration of proposal related to onboard CO₂ capture.

7.49 In the ensuing discussion, several delegations expressed the importance of onboard CO₂ capture as possible technological means to achieve the levels of GHG reduction set out in the IMO GHG Strategy, in particular during the transition to zero-carbon fuels, and the need to further enhance the general understanding of these technologies in shipping. Several delegations referred to IPCC reports which recognized CO₂ removal and storage as one of the means to achieve carbon neutrality.

7.50 Several delegations, also referring to the draft terms of reference set out in paragraph 37 of document MEPC 79/7/16 and the development of a specific work plan, supported initiating a holistic consideration on how to best reflect onboard CO₂ capture in various IMO instruments, including by means of a new dedicated work stream for ISWG-GHG.

7.51 Several of these delegations emphasized the urgency of initiating this work as soon as possible and suggested the inclusion of the proposed dedicated work stream on the agenda of ISWG-GHG 14 or 15.

7.52 Several other delegations, in concurring in principle with the emission reduction potential of onboard CO₂ capture technology, stressed that a holistic approach and careful consideration would be required on this complex issue, such as accounting, storage and disposal, and relevant certification schemes, to ensure effective implementation so that carbon captured would not be released back into the atmosphere. Those delegations emphasized that it would be preferable to finalize the development of the LCA guidelines before initiating a comprehensive consideration of how to integrate onboard CO₂ capture in the various IMO instruments. Some of these delegations also referred to the already heavy workload of ISWG-GHG between MEPC 79 and 80, and therefore preferred to defer consideration of these proposals to the next session.

7.53 Following consideration, the Committee agreed to further consider proposals related to onboard CO₂ capture set out in the documents mentioned above at MEPC 80, and invited interested Member States and international organizations to submit further information, comments and proposals on onboard CO₂ capture to that session.

Implementation of the short-term GHG reduction measure and its review

7.54 The Committee noted that the amendments to MARPOL Annex VI relating to the short-term GHG reduction measure as set out in resolution MEPC.328(76) had entered into force on 1 November 2022.

7.55 The Committee recalled that MEPC 78 had adopted guidelines supporting the implementation of the short-term GHG reduction measure, including the *2022 Interim guidelines on correction factors and voyage adjustments for CII calculations* (CII Guidelines, G5), as set out in resolution MEPC.355(78).

7.56 The Committee also recalled that the Committee had invited interested Member States and international organizations to collect relevant data in the early years of implementation of the CII rating system and to report relevant information to the Committee ahead of the review of the CII regulations and associated guidelines to be completed at the latest by 1 January 2026; and had invited Member States and international organizations, as well as the Secretariat, to submit proposals on how the review of the short-term measures could be conducted in an effective and efficient way.

Matters regarding the implementation and review of the CII framework

7.57 In connection with the matters regarding the implementation and review of the CII framework, the Committee had for its consideration the following documents:

- .1 MEPC 79/7/1 (INTERTANKO), outlining the urgency to consider the case of steam-driven LNG carriers, which represented a considerable proportion of the current LNG shipping fleet; suggesting that this group of ships had a totally different type of propulsion system to the majority of commercial ships and consequently that this group of ships would have a very poor CII rating because the concept of CII and EEXI requirements and guidelines had not taken into account such a significant difference in the operational system of steam-driven propulsion system; and proposing to 1) develop a "fleet compliance option" allowing operators to offset "D" and "E" ratings against ships which achieved better ratings; 2) revise the CII rating system by adopting appropriate correction factors to make it indicative of efficient transport work; and 3) acknowledge the limitations of EEXI guidelines for steam-driven LNG carriers;
- .2 MEPC 79/7/2 (INTERTANKO), explaining the negative impact that the lower cruising speeds and/or extended idle times had on the CO₂ footprint of steam-driven LNG carriers; and therefore suggesting the need to introduce a correction factor in the calculation of the attained CII value for steam-driven LNG carriers; proposing amendments to the 2022 CII G5 Guidelines (resolution MEPC.355(78)); and also commenting that the EEXI regulation was not conceptually adequate to steam-driven LNG ships;
- .3 MEPC 79/7/13 (Bahamas et al.), commenting on the scope of the CII G5 Guidelines and providing further justification of additional correction factors for short voyages and port waiting time; and reiterating the proposals in

document ISWG-GHG 12/2/3 that the aforementioned correction factors were two of several key elements that should be incorporated into the CII system;

- .4 MEPC 79/7/15 (Bahamas and ICS), expressing the view that the power used to cool and/or freeze all cargo on board refrigerated cargo carriers should also be included within the scope of the $FC_{electrical,j}$ correction factor, and proposing amendments to the CII G5 Guidelines;
- .5 MEPC 79/7/21 (CLIA), informing about the progress of the work to develop an alternative CII metric for cruise passenger ships, which was led by the Cruise Ship Safety Forum (CSSF) CII subgroup, and CLIA's intention to submit a proposal to MEPC 80 on the alternative metric for cruise passenger ships, and inviting Member States and NGOs to participate in the group;
- .6 MEPC 79/7/27 (ICS and INTERCARGO), proposing the adoption at this session of the draft amendments to the 2022 CII reference lines guidelines (G2) (resolution MEPC.353(78)) to establish self-unloading bulk carriers as a separate category of ship with its own reference line; and expressing the view that the proposed amendments were built on the guidelines adopted by the Committee and did not change the method of calculating a ship's carbon intensity; and
- .7 MEPC 79/INF.19 (INTERCARGO), commenting on the CII G5 Guidelines providing information on the effects of charterers' orders, distance travelled and waiting times on Carbon Intensity Indicators; highlighting some of the challenges faced by bulk carrier shipowners/ship managers (and other segments) and the need for further correction factors and/or voyage adjustments.

7.58 In the ensuing discussion, several delegations reiterated concerns with regard to the non-inclusion of several proposed correction factors and voyage adjustments in the Interim guidelines on correction factors and voyage adjustments for CII calculations (CII Guidelines, G5), which in their view would result in unfair effects on the CII rating for similar ships operating on different routes because of circumstances outside their control.

7.59 These delegations emphasized that, as a result, operators might avoid ports with long waiting times and/or short voyages, which could lead to unwanted consequences such as modal shift from maritime to air or road, and requested the Committee to reconsider some of the proposed correction factors and voyage adjustments in the documents submitted to this session.

7.60 Several delegations, in thanking the submitters of the documents for sharing their experience and expressing support in general for further assessing the implementation and enforcement of the short-term measure, stressed that the inclusion of possible additional correction factors/voyage adjustments in the CII Guidelines (G5) required careful consideration against the effectiveness of the short-term measures in its GHG emission reduction potential to avoid possible weakening of the measure.

7.61 Several of these delegations recalled that the EEDI Calculation Guidelines had been reviewed several times, taking into account the relevant implementation experience and that a similar approach could be followed to improve the relevant EEXI and CII Guidelines; that more time in implementation of the short-term measure and more relevant data would be needed before initiating a review of the CII Guidelines (G5); that additional information should

be collected through IMO DCS to enable such a review; and that instead of only reviewing the CII Guidelines (G5) the planned holistic review of the short-term measure by 1 January 2026 would be preferable; and, in that regard, requested the Secretariat to submit a proposal on how to review the short-term measure to the next session for consideration by the Committee.

7.62 Following consideration, the Committee agreed to defer further consideration of the above-mentioned seven documents regarding the implementation and review of the CII framework to MEPC 80, for consideration by the Working Group on Air Pollution and Energy Efficiency, expected to be established at that session, and requested the Secretariat to submit a proposal to the next session on how the review of the short-term measure could be conducted in an effective and efficient way for consideration by the Committee.

7.63 As requested, the statements made by the delegation of Spain and the observer from ICS are set out in annex 16.

Information on specific technologies available to comply with the short-term GHG reduction measure

7.64 In connection with the information on specific technologies available to comply with the short-term GHG reduction measure, the Committee noted the following documents:

- .1 MEPC 79/7/26 (Comoros et al.), commenting on document MEPC 79/INF.21 (Comoros et al.) on wind propulsion technologies, highlighting the need for a level playing field in policy and decarbonization pathway development regarding the integration of wind propulsion, and that wind should be prioritized in a similar manner to new, alternative commoditized fuels in future regulations; and reiterating the importance of further work on the assessment and verification of the performance of ships equipped with wind propulsion technologies, also taking into consideration important safety aspects;
- .2 MEPC 79/INF.8 (Secretariat), informing the Committee of the recently finalized *Practical guide to the selection of energy-efficiency technologies for ships*, which was developed by the Global Industry Alliance to Support Low Carbon Shipping (Low Carbon GIA), within the framework of the IMO-Norway GreenVoyage2050 Project; and setting out basic actions that should be taken before considering the use of retrofitting technologies for improving ships' energy efficiency; and also providing helpful guidance when selecting relevant technologies;
- .3 MEPC 79/INF.21 (Comoros et al.), providing information on the current state of technology and development of wind propulsion technologies (WPTs) for ships and highlighting the need to develop dedicated regulations enabling a full uptake of these technologies; introducing several projects, case studies and market forecasts; providing an update on recent WPT installations and policy/regulatory developments; and identifying recent developments relating to performance and verification methods, standardization/class rules contributing to developing a framework where wind propulsion takes shape as a technically reliable and mature option; and
- .4 MEPC 79/INF.23 (Secretariat), introducing the report "Analysis of the impact of biofouling on the hydrodynamic resistance and energy efficiency of ships", which was commissioned by the Global Industry Alliance (GIA), as established under the GEF-UNDP-IMO GloFouling Partnerships project, to increase understanding within the shipping industry of the relationship

between ships' biofouling, fuel consumption and resulting GHG emissions; and highlighting the notable potential of biofouling management measures to reduce GHG emissions and importance of data accumulation.

Outcome of III 8 regarding the short-term GHG reduction measure

7.65 The Committee noted the discussion at III 8 on the PSC procedures related to short-term carbon intensity reduction measures, in particular the conclusion that at this stage there was no support within the III Sub-Committee to consider as a detainable deficiency the absence of implementation by the ship as planned at the time of the inspection of the three-year implementation plan and/or the plan of corrective actions for a ship rated as D for three consecutive years, or rated as E.

Terms of reference for ISWG-GHG 14 and 15

7.66 The Committee recalled that C 127 had endorsed the Committee's approval of the holding of two meetings of ISWG-GHG between MEPC 79 and MEPC 80. The Committee further noted that the fourteenth and fifteenth meetings of the Group had been scheduled for 20 to 24 March 2023 and for 26 to 30 June 2023, respectively.

7.67 Following consideration of the draft terms of reference for ISWG-GHG 14 and 15, as set out in annex 3 to document MEPC 79/WP.5, the Committee approved the terms of reference as set out below:

"The Intersessional Working Group on Reduction of GHG Emissions from Ships is instructed, taking into account documents submitted to the ISWG-GHG meetings and MEPC sessions, the final report of the Correspondence Group on Marine Fuel Life Cycle GHG Analysis, and relevant documents submitted to MEPC 80, to:

- .1 further consider and finalize the development of the draft revised IMO Strategy on reduction of GHG emissions from ships;
- .2 further consider and finalize the assessment and selection of measure(s) to further develop in the context of Phase II of the Work plan for the development of mid- and long-term measures;
- .3 further consider the revision of the IMO ship fuel oil consumption Data-Collection System (DCS);
- .4 consider the final report of the Correspondence Group on Marine Fuel Life Cycle GHG Analysis with a view to finalization of the LCA guidelines (for ISWG-GHG 15 only); and
- .5 submit a written report of ISWG-GHG 14 and ISWG-GHG 15 to MEPC 80, respectively."

Establishment of the Working Group on Reduction of GHG Emissions from Ships

7.68 Following consideration of various items under this agenda item, the Committee established the Working Group on Reduction of GHG Emissions from Ships and instructed it, taking into account comments and decisions made in plenary, to:

- .1 further develop the draft revised IMO Strategy on reduction of GHG emissions from ships, using annex 2 to document MEPC 79/WP.5 as a basis; and
- .2 finalize the consideration of draft amendments to resolutions MEPC.323(74) and MEPC.327(75), as set out in annex 1 and 2 to document MEPC 79/7/14 (Australia et al.), and prepare draft revised resolutions for adoption at this session.

Report of the Working Group on Reduction of GHG Emissions from Ships

7.69 Having considered the report of the Working Group on Reduction of GHG Emissions from Ships (MEPC 79/WP.10), the Committee approved it in general and took action as outlined below.

Draft revised IMO Strategy on reduction of GHG emissions from ships

7.70 The Committee noted the Group's discussion on the further development of the draft revised IMO GHG Strategy on the basis of annex 2 to document MEPC.79/WP.5 and that the Group had agreed that the text of the draft revised IMO GHG Strategy as set out in annex 1 of document MEPC 79/WP.10 represented the Chair's reflection of the status of the discussions, which was not reviewed by the Group, and would be further considered by the Group at its next session.

7.71 In this connection, one delegation stressed that the further work on the development of the draft revised Strategy should take into account documents submitted to future MEPC and ISWG-GHG meetings. Other delegations expressed the view that this had been well addressed in the agreed terms of reference for ISWG-GHG 14 and ISWG-GHG 15.

7.72 The delegation of India, in referring to resolution MEPC.229(65) on *Promotion of technical cooperation and transfer of technology relating to the improvement of energy efficiency of ships*, to provide technical assistance to Member States to enable cooperation in the transfer of energy-efficient technologies, in particular to developing countries as listed in the new appendix on "Overview of previous work undertaken by IMO to address GHG emissions from ships" in annex 2 to document MEPC.79/WP.5, in particular, operative paragraph 8 of the resolution, requested the Secretariat to provide an update to the next ISWG-GHG meeting or MEPC 80 on the status of the agreed review of the effective implementation of resolution MEPC. 229(65).

7.73 The statement made by the delegation of Canada is set out in annex 16.

Draft amendments to resolutions MEPC.323(74) and MEPC.327(75)

7.74 The Committee, having noted the Group's discussion on the proposed draft amendments to resolutions MEPC.323(74) and MEPC.327(75), set out in annexes 1 and 2 to document MEPC 79/7/14, adopted resolution MEPC.366(79) on *Invitation to Member States to encourage voluntary cooperation between the port and the shipping sectors to contribute to reducing GHG emissions from ships* and resolution MEPC.367(79) on *Encouragement of Member States to develop and submit voluntary National Action Plans (NAPs) to address GHG emissions from ships*, as set out in annexes 11 and 12, respectively.

7.75 The delegation of India expressed concerns and reservation regarding the inclusion in the preamble section of the revised resolution on voluntary cooperation between the port and the shipping sectors to contribute to reducing GHG emissions from ships of a reference to regulation 28.10 of MARPOL Annex VI encouraging Administrations, port authorities and other stakeholders to provide incentives to ships rated as A or B, as appropriate, objecting to referring to binding requirements from MARPOL Annex VI in a voluntary resolution. The delegation of India further expressed the view that it was premature as the first CII ratings would only become available by 2024 and including such a reference might lead to discrimination between ships.

8 FOLLOW-UP WORK EMANATING FROM THE ACTION PLAN TO ADDRESS MARINE PLASTIC LITTER FROM SHIPS

IMO Study on marine plastic litter from ships

8.1 The Committee recalled that MEPC 77 had requested the Secretariat to engage a consultant, using financial contributions received to date, to review the terms of reference for the IMO Study on marine plastic litter from ships, taking into consideration GESAMP Reports and Studies No. 108, and to advise the Committee on how the Study could progress, such that it could make adjustments to the terms of reference as required.

8.2 In this context, the Committee had for its consideration the following documents:

- .1 MEPC 79/8 (Secretariat), providing an update on the financial contributions towards the IMO Study on marine plastic litter from ships and containing the recommendations from the report by an external expert on the review of the terms of reference of the Study; and
- .2 MEPC 79/INF.18 (Secretariat), containing the full report of the external expert in its annex.

8.3 The Committee thanked the Governments of Australia, Germany, Norway, Sweden and the United Arab Emirates for their financial contributions towards the IMO Study on marine plastic litter from ships.

8.4 In the ensuing discussion, all delegations who spoke agreed with the recommendation in document MEPC 79/8 to revise points 1 and 2 of the terms of reference for the IMO Study on marine plastic litter from ships and adopt a stepwise approach by pursuing sub-projects that addressed specific data gaps (e.g. by region, by industry, by ship type or by type of litter).

8.5 Many delegations highlighted the need for cooperation with other stakeholders in pursuing both the *Action Plan to Address Marine Plastic Litter from Ships* (resolution MEPC.310(73)) and the terms of reference for the IMO Study on marine plastic from ships in order to work towards the global assessment.

8.6 In this regard, several delegations stressed the importance of cooperation with Regional Sea Conventions, including OSPAR and HELCOM, as these conventions were key stakeholders and significant contributors to future work to progress the terms of reference for the Study and the wider aims of the Action Plan. Thus, these delegations supported specific references to the Regional Sea Conventions in the revised terms of reference for the IMO Study on marine plastic litter from ships.

8.7 Additionally, several delegations expressed the view that the Secretariat should strengthen its cooperation with other UN entities, including UNEP and GPML, to progress the work under the Action Plan. Other delegations mentioned the valuable work being done by the GloLitter Partnerships Project and its potential important contributions to the IMO Study.

8.8 During consideration of how to proceed, several delegations stressed the importance of modelling and monitoring in achieving the aims of the IMO Study and the Action Plan as well as the value of a risk-based approach to identifying priority areas for future work. One delegation expressed the view that the revision of the terms of reference for the IMO Study should not include further desktop studies or literature reviews.

8.9 While highlighting the importance of IMO's work to address marine plastic pollution from ships, some delegations emphasized the need for timely action. In this connection, two delegations stressed the importance of aligning the timeline for IMO's work on the Action Plan with other international plastic pollution markers, such as:

- .1 SDG target 14.1 (to prevent and significantly reduce marine pollution of all kinds by 2025); and
- .2 the preparation by 2024 of an international legally binding instrument on plastic pollution, including in the marine environment, by the intergovernmental negotiating committee (INC).

8.10 In this connection, these delegations also encouraged IMO to contribute its expertise regarding sea-based sources of marine plastic litter to the negotiations of the INC on plastic pollution.

8.11 Following discussion, the Committee agreed with the proposals in paragraph 25 of document MEPC 79/8 and subsequently invited submissions by interested Member States and international organizations to MEPC 80 to assist the Committee in deciding how to progress with the IMO Study on marine plastic litter from ships, taking into account the recommendations contained in the external expert's report (MEPC 79/8 and MEPC 79/INF.18). Such submissions could, for example, identify priority areas to be addressed by sub-projects, propose revised terms of reference for the IMO Study on marine plastic litter, or comment on how the GloLitter Partnerships Project could contribute towards the fulfilment of the terms of reference for the study.

8.12 In concluding on this matter, the Committee invited the Secretariat to strengthen its cooperation with other stakeholders, such as UNEP, GPML and Regional Sea Conventions.

8.13 As requested, the statement by the delegation of Colombia is set out in annex 16.

Other matters related to marine plastic litter from ships

8.14 The Committee had for its consideration the following documents:

- .1 MEPC 79/INF.13 (Republic of Korea), describing a method for predicting the sources and amount of marine debris based on big data technology, developed as part of the "Development of Smart Technology to Support the Collection and Management of Marine Debris", a national research and development project of the Government of the Republic of Korea; and

- .2 MEPC 79/INF.20 (South Africa), containing a report on the South African Maritime Safety Authority's experience from the clean-up operation following the **MSC Susanna** plastic pellet spill incident.

8.15 Having noted the information in both documents, the Committee agreed to forward both documents to PPR 10 for information.

9 REPORTS OF OTHER SUB-COMMITTEES

Outcome of HTW 8

Draft amendments to the Guidelines for the development, review and validation of model courses

9.1 The Committee approved the draft amendments to the *Guidelines for the development, review and validation of model courses* (MSC-MEPC.2/Circ.15/Rev.1), as set out in annex 5 to document HTW 8/16, providing new appendices 4 and 5 on Action verb taxonomy for model courses and Guidance on learning outcomes, respectively, having noted that MSC 106 had also approved the draft amendments. Consequently, the Committee instructed the Secretariat to revise the Guidelines accordingly and issue them as MSC-MEPC.2/Circ.15/Rev.2.

Outcome of SSE 8

Amendments to the 2014 Standard specification for shipboard incinerators

9.2 Having considered the draft MEPC resolution on amendments to the *2014 Standard specification for shipboard incinerators* (resolution MEPC.244(66)), as prepared by SSE 8 and set out in annex 17 to document SSE 8/20, revising the provisions of its annex 2 on fire protection requirements for incinerators and waste stowage spaces to remove the discrepancies between the resolution and SOLAS chapter II-2, the Committee adopted resolution MEPC.368(79) on *Amendments to the 2014 Standard specification for shipboard incinerators* (resolution MEPC.244(66)), as set out in annex 13.

Outcome of III 8

9.3 The Committee approved, in general, the report of the eighth session of the Sub-Committee on Implementation of IMO Instruments (III 8/19) and took action as indicated below.

GISIS PRF module – proposed data transfer mechanism

9.4 The Committee noted the outcome of the consideration by III 8 of document MEPC 77/14 (Austria et al.) (III 8/19, paragraph 3.10) and requested the Secretariat to undertake a review of the full functionality and interoperability of the PRF (Port Reception Facilities) module in GISIS, with a view to looking into the resources required to develop and implement the data transfer mechanism outlined in document MEPC 77/14, to advise the Committee at a future session. Further, the Committee agreed that this review of the PRF module should also take into account, and be aligned with, the broader work being carried out under the GISIS review and data management project.

PSC procedures associated with the short-term carbon intensity reduction measures

9.5 The Committee recalled that the action requested of it by III 8 in relation to the PSC procedures associated with the short-term carbon intensity reduction measures had been considered under agenda item 7 (see paragraph 7.65)

Extension of the scope of output 7.5

9.6 The Committee concurred with the decision of MSC 106 to approve the recommendation of the III Sub-Committee to rename output 7.5 as "Identified issues relating to the implementation of IMO instruments from the analysis of data" from "Identified issues relating to the implementation of IMO instruments from the analysis of PSC data", thereby extending its scope.

Process of updating the Survey Guidelines under the HSSC

9.7 The Committee recalled that A 31, having considered document A 31/10/2 (Germany et al.), in connection with the draft Assembly resolution on the Survey Guidelines under the HSSC, had noted that a number of delegations supported the proposals contained therein, in particular regarding the principle that draft amendments to the Guidelines should be linked to mandatory requirements.

9.8 The Committee also recalled that the Committees had instructed III 8 to consider the matter, seek the Committees' advice in case a policy decision was needed, and report back to the Committees accordingly (MSC 104/18, paragraphs 2.4 and 2.5, and MEPC 77/16, paragraph 10.15).

9.9 Having considered the outcome of III 8 in this regard, the Committee, in concurrence with the corresponding decisions by MSC 106 (MSC 106/19, paragraph 14.15):

- .1 reaffirmed the agreed methodology (MSC 78/26, paragraph 10.12; MEPC 49/22, paragraph 10.2.9) that the III Sub-Committee should coordinate the review so that whenever an amendment to a statutory instrument was adopted which entailed consequential amendments to the Survey Guidelines, draft amendments to the Survey Guidelines should be developed by the Sub-Committee under its continuous item on "Updated Survey Guidelines under the Harmonized System of Survey and Certification (HSSC)" before the entry into force of the amendments;
- .2 agreed to the principle that draft amendments to the Survey Guidelines should be derived from and linked to mandatory requirements, which, however, should not mean that in describing how the items should be surveyed, additional and effective implementing measures directly linked to the mandatory requirements were excluded from the scope of the Survey Guidelines under the HSSC;
- .3 endorsed the view of the III Sub-Committee that the phrase "directly linked to requirements in mandatory instruments" should be understood as "the Survey Guidelines under the HSSC should include survey instructions for items based on mandatory instruments"; and
- .4 endorsed the recommendation of the III Sub-Committee that the review exercise to identify any existing gaps between the Survey Guidelines and the mandatory requirements, with a view to removing those items not directly

linked to requirements in mandatory instruments, should not prevent the approval and adoption of updated Guidelines as usual, given that the review exercise might take time to complete.

Definition of UNSP barges

9.10 With regard to document MEPC 77/14/5 (China), which previously had been referred by the Committee to the III Sub-Committee for consideration, with a view to advising the Committee accordingly (MEPC 77/16, paragraph 14.8), the Committee noted the discussion by III 8 regarding the request in document MEPC 77/14/5 for clarification of the definition of UNSP barges in MARPOL Annex VI (III 8/19, paragraph 10.12). Following consideration, the Committee endorsed the conclusion of III 8 that no further action was required.

Survey and certification under AFS 2001

9.11 In relation to document MEPC 76/13/1 (World Coatings Council), which proposed that the International Anti-fouling System Certificates be issued by flag State Administrations for ships flying their flag without any additional procedures for anti-fouling paints that were not required under the AFS Convention, the Committee had for its consideration the conclusion of III 8 following the Sub-Committee's consideration of the document upon the Committee's previous request (MEPC 78/17, paragraph 15.6).

9.12 Subsequently, the Committee endorsed the conclusion of III 8 that under the AFS Convention there was no such requirement for type approval as pre-qualification for anti-fouling paint products for issuance of an International Anti-fouling System Certificate, though it should be at the discretion of the Administration to decide if more than what was required under the provisions of the Convention was needed.

Assembly resolutions to be prepared by III 9

9.13 Having noted the outcome of MSC 106 with regard to the authorization for III 9 to report the outcome on matters related to draft Assembly resolutions directly to A 33 (MSC 106/19, paragraph 14.17), the Committee concurred with the decision of MSC 106 and authorized III 9 to report the outcome of its work related to the Procedures for port State control, 2023; the Survey Guidelines under the HSSC 2023, including provisions for remote surveys; the revised Guidelines on the implementation of the ISM Code by Administrations, including provisions for remote ISM Code audits; and the Non-exhaustive list of obligations under instruments relevant to the III Code, which would require the adoption of Assembly resolutions, directly to A 33.

Model courses and e-learning

9.14 The Committee had for its consideration the action requested of it by III 8 (MEPC 79/9/2, paragraph 2.14) in relation to the request by the Committees for the Sub-Committee to consider how e-learning training material could assist with the implementation of instruments other than the STCW Convention (MSC 102/24, paragraph 13.3; MEPC 75/18, paragraph 11.4).

9.15 In this regard, the Committee, having taken into account the workloads of the sub-committees, concurred with the corresponding decision of MSC 106 (MSC 106/19, paragraph 14.20) and requested the Secretariat to provide a list of relevant e-learning courses under the remit of each sub-committee to assist in their prioritization by the sub-committees in relation to the implementation of instruments other than the STCW Convention, taking into account the List of IMO Model Courses set out in annex 7 to document III 8/19, but not limited to the courses in the list.

Outcome of CCC 8

9.16 With regard to the outcome of CCC 8 in relation to the IGF Code and alternative fuels (MEPC 79/9/3, paragraphs 2.1.1 and 2.1.2), the Committee:

- .1 noted that MSC 106 had approved the expansion of output 2.3 to accommodate alternative fuels not considered as having a low-flashpoint and had agreed for the title of the output to be changed to "Amendments to the IGF Code and development of guidelines for alternative fuels and related technologies", based on the recommendation of CCC 8; and
- .2 noted the updated work plan for the development of the IGF Code and safety provisions on alternative fuels, as set out in annex 2 to document CCC 8/18.

10 IDENTIFICATION AND PROTECTION OF SPECIAL AREAS, ECAs AND PSSAs**Expression of condolence**

10.1 The delegation of Australia informed the Committee of the passing of Mr. Paul Nelson, by many remembered as the "grandfather of Particularly Sensitive Sea Areas" and who had been instrumental in the establishment of the first PSSA in 1990 for Australia's Great Barrier Reef.

10.2 The Committee expressed its appreciation for Mr. Nelson's contribution to the work of the Organization and requested the delegation of Australia to convey its sincere condolences and sympathy to his family.

Designation of a PSSA in the North-Western Mediterranean Sea to protect cetaceans from international shipping

10.3 The Committee had for its consideration document MEPC 79/10 (France, Italy, Monaco and Spain) proposing the designation of a PSSA in the North-Western Mediterranean Sea.

10.4 The Committee noted that the designation of the proposed PSSA aimed to protect cetaceans from the risk of ship collisions, ship-generated pollution and to increase awareness of a critically important area for the fin whale and the sperm whale. The Committee also noted that the proposed PSSA encompassed the Pelagos Sanctuary and the Spanish cetacean corridor, which had been already designated as Special Protected Areas of Mediterranean Importance under the Barcelona Convention and the UN Mediterranean Action Plan dedicated to the conservation of cetaceans.

10.5 In the ensuing discussion, there was widespread support for the proposal in document MEPC 79/10, and the Committee noted, inter alia, the following views:

- .1 the vulnerability of large cetaceans and the risk of collisions in the proposed PSSA area was highlighted, and the increased risk in this particular area compared to the rest of the Mediterranean Sea. Therefore, it was proposed that the area would benefit from several proposed Associated Protected Measures, which were voluntary in nature;
- .2 the establishment of the PSSA was justified owing to the concentration of protected marine mammals in this area, and that maritime traffic had been identified by the scientific community as one of the main threats to these populations. The vulnerability of these species to both international and local shipping activities had been demonstrated by international studies and data reported by several networks as well as by coastal and port States;

- .3 the importance of the area was emphasized, which enjoyed protection under various other regional and national measures, and that its designation as a PSSA along with the proposed associated protective measures would provide even further protection;
- .4 it was suggested that the co-sponsors could be encouraged to share data generated under these efforts with the International Whaling Commission; and
- .5 it was noted that Costa Rica, together with France, had offered to co-host the next UN Ocean Conference in 2024/2025 and that there had been a positive experience with a similar case, namely the establishment of an area to be avoided off the Pacific coast of Costa Rica for the purpose of avoiding collisions with large cetaceans, as approved by the fourth session of NCSR and adopted by MSC 98 in 2017.

10.6 Following discussion, the Committee agreed to set up a Technical Group on the Designation of a PSSA to further review the proposal contained in document MEPC 79/10.

Establishment of the Technical Group on the Designation of a PSSA

10.7 The Committee established the Technical Group on the Designation of a PSSA, and instructed it, taking into account the comments and decisions made in plenary, to review the proposal to designate the North-Western Mediterranean Sea as a PSSA (MEPC 79/10), with a view to assessing whether it met the provisions of the Revised PSSA Guidelines (resolution A.982(24), as amended by resolution MEPC.267(68)) and whether all the information required by the *Guidance document for submission of PSSA proposals to IMO* (MEPC.1/Circ.510) had been provided and to advise the Committee on action as appropriate.

Report of the Technical Group on the Designation of a PSSA

10.8 The Committee considered the report of the Technical Group (MEPC 79/WP.8), approved it in general and took action as described below.

10.9 The Committee noted that, having reviewed the submission to designate the North-Western Mediterranean Sea as a PSSA (MEPC 79/10), the Technical Group agreed that the submission met the conditions and requirements of the Revised PSSA Guidelines.

10.10 The Committee:

- .1 agreed in principle to the designation of the North-Western Mediterranean Sea as a PSSA, subject to the further development and approval of the proposed associative protective measures by the appropriate Sub-Committee or Committee;
- .2 agreed to inform NCSR as the appropriate sub-committee responsible for addressing the particular associated protective measures proposed for the area of the outcome of this assessment;
- .3 invited MSC to note the Committee's decisions on this matter; and
- .4 invited the co-sponsors of document MEPC 79/10 to:
 - .1 further develop the proposed associated protective measures and submit to NCSR as the appropriate sub-committee for approval; and

- .2 inform the Committee once the associated protective measures had been approved and invite the Committee to designate the area as a PSSA at a future session.

Information relevant to the Red Sea and the Gulf of Aden special areas under MARPOL Annexes I and V

10.11 The Committee noted document MEPC 79/INF.11 (PERSGA) providing information related to the Red Sea and the Gulf of Aden special areas under MARPOL Annexes I and V, in particular that all the countries in the area, except for Eritrea and Yemen, had ratified the Convention and provided for adequate reception facilities and arrangements, including waste treatment facilities.

11 APPLICATION OF THE COMMITTEES' METHOD OF WORK

11.1 The Committee noted that, subject to concurrent approval by this Committee, MSC 106 had approved amendments to the *Organization and method of work of the Maritime Safety Committee and the Marine Environment Protection Committee and their subsidiary bodies* (MSC-MEPC.1/Circ.5/Rev.3), regarding the introduction of a five working day period for commenting on the draft report and generally not introducing documents in plenary (MSC 106/19, paragraph 15.13; and MSC 106/19/Add.1, annex 26).

11.2 In concurrence with the decision by MSC 106, the Committee approved the aforementioned amendments and requested the Secretariat to revise the *Organization and method of work of the Maritime Safety Committee and the Marine Environment Protection Committee and their subsidiary bodies* (MSC-MEPC.1/Circ.5/Rev.3) accordingly, and issue the revised method of work as MSC-MEPC.1/Circ.5/Rev.4.

12 WORK PROGRAMME OF THE COMMITTEE AND SUBSIDIARY BODIES

Proposals for new output

Revision of MARPOL Annex II in order to improve the effectiveness of cargo tank stripping, tank washing operations and prewash procedures for products with a high melting point and/or high viscosity

12.1 The Committee considered document MEPC 79/12 (Austria et al.), proposing a new output to amend MARPOL Annex II in order to improve the effectiveness of cargo tank stripping, tank washing operations and prewash procedures for products with a high melting point and/or high viscosity, together with the Chair's preliminary assessment of the proposal (MEPC 79/WP.3, annex).

12.2 In the ensuing discussion, most delegations who spoke expressed support for the proposed new output, with some commenting or expressing specific concerns with regard to certain aspects of the proposal. In this connection, the Committee noted, inter alia, the following comments:

- .1 since new information had called into question the efficiency and adequacy of the existing prewash requirements and the relevant operations applicable to persistent floating products with a high viscosity and/or a high melting point, it was necessary to consider improvements of the overall effectiveness of cargo tank stripping, tank washing operations and the prewash procedures applied to such cargoes;

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- .2 there would be increased costs for ship operators as a result of the increased energy requirements for the prewash operations cited in annex 1 to document MEPC 79/12, and there were technical concerns over the ability of the existing fleet's ability to generate the required heat energy referred to therein;
 - .3 the proposed new output could be supported subject to the PPR Sub-Committee being able to consider a variety of proposals on how the issues raised in document MEPC 79/12 could be addressed;
 - .4 the proposed prewash procedure set out in annex 1 to document MEPC 79/12 required further technical consideration to make it more effective and efficient, since the details of the procedure might vary depending on the nature of each cargo and the procedure should afford a degree of flexibility to accommodate the specific condition of the cargo tank;
 - .5 in document MEPC 79/12, it was stated that crews were not always sufficiently familiar with proper stripping procedures and, in some cases, cargo tanks were not stripped owing to the crew wanting to avoid the risk of a clogged stripping line, which raised the question of whether a revision of the procedures would have any significant effect;
 - .6 it was not clear if document MEPC 79/12 was proposing that the application of the discharge requirements for persistent floating products with a high viscosity and/or a high melting point, as adopted by resolution MEPC.315(74), which entered into force on 1 January 2021 and were applicable in certain European waters, ought to be extended worldwide;
 - .7 while tank stripping and prewash procedures fell directly under the purview of MARPOL Annex II, tank washing operations did not other than in respect of discharge of cargo residues, so further details were needed with regard to what exactly was being proposed in document MEPC 79/12 in relation to tank washing operations;
 - .8 the proposed procedure in annex 1 to document MEPC 79/12 resulted in increased GHG emissions from ships, and it also impacted CII values given that there was no corresponding mileage associated with such a procedure;
 - .9 further details were required to better understand what was being proposed with regard to stripping test requirements;
 - .10 it was unclear whether document MEPC 79/12 was proposing that the requirement for analyses by a surveyor should be extended to pollution category Y products that were classified as persistent floaters and had a high viscosity and/or a high melting point; should that be the case, careful consideration should be given to the availability of surveyors, particularly since ship operators faced challenges in that regard even under the existing requirements for pollution category X cargoes;
 - .11 it was important to ensure the availability of port reception facilities to accommodate the cargo residues and increased washwater discharges that would result from the implementation of the proposed revised prewash procedures; and

- .12 no analysis had been provided regarding the amount of time, energy and costs associated with implementing the proposed initiative, nor had the additional GHG or carbon expended during the port stay been assessed.

12.3 One delegation did not support the proposal in document MEPC 79/12 for a new output as, in their view, sufficient evidence had not been presented to merit a new output to amend MARPOL Annex II prewash procedures worldwide.

12.4 Following consideration, the Committee agreed to include in the post-biennial agenda of the Committee an output on "Amendments to MARPOL Annex II in order to improve the effectiveness of cargo tank stripping, tank washing operations and prewash procedures for products with a high melting point and/or high viscosity", assigning the PPR Sub-Committee as the associated organ, with two sessions needed to complete the output and with the understanding that the comments and concerns expressed at this session of the Committee would be taken into account by the Sub-Committee.

Amendments to the Revised guidelines and specifications for pollution prevention equipment for machinery space bilges of ships (resolution MEPC.107(49))

12.5 The Committee considered document MEPC 79/12/1 (China), proposing a new output to amend the *Revised guidelines and specifications for pollution prevention equipment for machinery space bilges of ships* (resolution MEPC.107(49)) to ensure the proper functioning of the onboard pollution prevention equipment, together with the Chair's preliminary assessment of the proposal (MEPC 79/WP.3, annex).

12.6 In the ensuing discussion, many delegations supported, in principle, the proposed new output, with the objective of eliminating the possibility of oily water, in which oil content potentially exceeded 15 ppm, from being discharged overboard in the event that sample water was blocked from flowing through the 15 ppm bilge alarm. In this context, some delegations supported the specific measure proposed in document MEPC 79/12/1, namely the installation of a flow or pressure sensor, while some other delegations expressed the view that considerations should not be limited to one method in order to ensure technical neutrality.

12.7 Furthermore, some delegations noted that approximately two decades had passed since the Revised Guidelines and Specifications had been adopted and proposed that they be subject to a complete revision, which would take into account experience gained from their implementation as well as recent developments (e.g. the development of new oil fuels and the possible need to consider whether the test fluids were suitably representative).

12.8 Subsequent to the above discussion, the Committee agreed to include in the post-biennial agenda of the Committee an output on "Revision of the *Revised guidelines and specifications for pollution prevention equipment for machinery space bilges of ships* (resolution MEPC.107(49))", with two sessions needed to complete the output, and assigning the PPR Sub-Committee as the associated organ.

Biennial agenda of the PPR Sub-Committee and provisional agenda for PPR 10

12.9 Having recalled that MEPC 78 had approved the biennial agenda of the PPR Sub-Committee for the 2022-2023 biennium and the provisional agenda for PPR 10 (MEPC 78/17, annexes 24 and 25), the Committee confirmed both.

Biennial agenda of the CCC Sub-Committee and provisional agenda for CCC 9

12.10 The Committee recalled that under agenda item 9 the Committee had noted the decision by MSC 106 to expand the scope and amend the title of the existing output 2.3 to read as "Amendments to the IGF Code and development of guidelines for alternative fuels and related technologies" (see paragraph 9.16).

12.11 The Committee noted that MSC 106 had approved, subject to MEPC's concurrent decision, the updated biennial status report of the Sub-Committee for the 2022-2023 biennium and the updated provisional agenda for CCC 9 (MSC 106/19/Add.1, annexes 27 and 28).

12.12 Subsequently, the Committee, in concurrence with MSC 106, approved the updated biennial status report of the CCC Sub-Committee for the 2022-2023 biennium and the updated provisional agenda for CCC 9.

Biennial agenda of the III Sub-Committee and provisional agenda for III 9

12.13 The Committee noted that MSC 106 had:

- .1 agreed to include a new output on "Development of guidance to assist competent authorities in the implementation of the Cape Town Agreement of 2012" in the biennial agenda of the III Sub-Committee for 2022-2023 (MSC 106/19, paragraph 16.17);
- .2 agreed, subject to concurrent decision by this Committee, to rename output 7.5 as "Identified issues relating to the implementation of IMO instruments from the analysis of data", extending the scope of the output (MSC 106/19, paragraph 14.12); and
- .3 approved the biennial status report of the Sub-Committee for the 2022-2023 biennium and the updated provisional agenda for III 9 (MSC 106/19/Add.1, annexes 27 to 28).

12.14 Subsequently, the Committee agreed to the renaming of output 7.5, subject to the endorsement by the Council, and approved the III Sub-Committee's biennial status report for the 2022-2023 biennium and the provisional agenda for III 9.

Status of the outputs of MEPC for the 2022-2023 biennium

12.15 Having recalled that, as per usual practice, the status of outputs would only be produced after the session as an annex to the Committee's report, in accordance with paragraph 9.1 of the *Application of the Strategic Plan of the Organization* (resolution A.1111(30)), to avoid any unnecessary duplication of work, the Committee invited the Council to note the status report of MEPC for the 2022-2023 biennium, as set out in annex 14.

Items to be included in the agenda of MEPC 80

12.16 The Committee, having considered document MEPC 79/WP.4 (Secretariat) and taken into account the decisions made at this session, approved the items to be included in the agenda of MEPC 80, as set out in annex 15.

Tentative dates for MEPC 80

12.17 The Committee noted that MEPC 80 had been tentatively scheduled to take place from 3 to 7 July 2023.

Correspondence groups

12.18 The Committee recalled that the Correspondence Groups on Review of the BWM Convention and on Marine Fuel Life Cycle GHG Analysis, established at MEPC 78 under agenda items 4 and 7, respectively, were due to present their reports to MEPC 80.

Intersessional meetings

12.19 The Committee recalled that C 127 had already endorsed, as requested by MEPC 78, the holding of an intersessional meeting of the ESPH Technical Group in 2023, which tentatively had been scheduled to take place from 30 October to 3 November 2023.

12.20 The Committee also recalled that C 127 had endorsed the holding of the fourteenth and fifteenth meetings of the Intersessional Working Group on Reduction of GHG Emissions from Ships before MEPC 80.

13 ELECTION OF THE CHAIR AND VICE-CHAIR

13.1 The Committee, in accordance with rule 18 of its Rules of Procedure, unanimously elected Dr. Harry Conway (Liberia) as Chair and Mr. Hanqiang Tan (Singapore) as Vice-Chair, both for 2023.

Expression of appreciation

13.2 The Committee expressed its profound gratitude and appreciation to Mr. Hideaki Saito (Japan) and Dr. Harry Conway (Liberia) for their excellent service during the last five years when they served as Chair and Vice-Chair, respectively.

14 ANY OTHER BUSINESS**Recent inter-agency activities**

14.1 The Committee noted the information contained in document MEPC 79/14 (Secretariat) on recent inter-agency activities and invited the Secretariat to continue to update the Committee with any significant inter-agency cooperation relating to the work of the Committee.

Special requirements for the use and carriage of oils as fuels in Arctic waters

14.2 The Committee had for its consideration document MEPC 79/14/1 (FOEI et al.), proposing that regulation 43A of MARPOL Annex I be amended to increase its effectiveness in protecting the Arctic from heavy fuel oil (HFO).

14.3 In the ensuing discussion, many delegations agreed with the aims of the proposal in principle but recognized that the provisions in regulation 43A as adopted by MEPC 76 represented a delicate compromise which had been reached following careful consideration and negotiations by the PPR Sub-Committee. Consequently, these delegations did not support reopening negotiations regarding regulation 43A of MARPOL Annex I at this time, though one delegation expressed the view that this regulation could be revisited in the future to provide increased protections to the Arctic environment.

14.4 Having noted that the proposal in document MEPC 79/14/1 had not garnered sufficient support, the Committee did not consider it further.

14.5 In this context, one delegation stressed the importance of ensuring that the criteria in regulation 43.1.2 of MARPOL Annex I captured the full range of fuels likely to be most damaging to the Arctic marine environment in the event of a spill as proposed in document MEPC 78/14/1 (Iceland and Norway) and recalled that MEPC 78 had forwarded that document to PPR 10 for further consideration, with a view to advising the Committee on how best to proceed.

Status of ISO/TC 8 activities on international standards related to the work of the Committee

14.6 Having considered document MEPC 79/INF.2 (ISO), providing an update on published ISO international standards that related to the work of the Committee, the Committee:

- .1 noted the work on published ISO international standards;
- .2 invited relevant IMO bodies to note the work undertaken by ISO, as set out in the annex to document MEPC 79/INF.2; and
- .3 invited interested Member States and international organizations to participate in the ISO standards development.

Recycling capacity for meeting the entry-into-force conditions of the Hong Kong Convention

14.7 The Committee noted the information contained in document MEPC 79/INF.3 (Secretariat) on the status of the Hong Kong Convention, including the calculation of recycling capacity for meeting the entry-into-force conditions of the Convention.

Status report on FSO SAFER

14.8 The Committee noted the information contained in document MEPC 79/INF.10 (Secretariat) providing a status report on **FSO SAFER** and the work of the Secretariat in mitigating the risk of a possible oil spill, in support of UN-wide efforts.

Information on the 2022 Korea Maritime Week

14.9 The Committee noted the information contained in document MEPC 79/INF.28 (Republic of Korea) in relation to the 2022 Korea Maritime Week, which had been held from 21 to 23 September 2022 in Busan, Republic of Korea, as well as information provided orally by the delegation of the Republic of Korea regarding the 2023 Korea Maritime Week to be held from 14 to 16 June 2023, including a ministerial conference on 14 June 2023 to discuss responses to the climate crisis.

Situation concerning "Mount Hikurangi"

14.10 The Committee noted statements by the observer from ICS, followed by the delegations of Hong Kong, China and China with regard to the situation concerning **Mount Hikurangi** and, in particular, its Captain Yu Yihai, who had been held for 16 months in Honduras without trial, and whose application for bail had been recently refused by the Sentencing Court in the Honduras capital, Tegucigalpa. As requested, the full texts of the statements are set out in annex 16.

14.11 In this regard, the Committee noted that the Secretariat would continue to monitor the situation and update the relevant IMO bodies, as appropriate.

Expression of appreciation

14.12 The Committee expressed appreciation to the following delegates and members of the Secretariat, who had recently relinquished their duties, retired or been transferred to other duties, or were about to do so, for their invaluable contribution to its work and wished them a long and happy retirement or, as the case might be, every success in their new duties:

- Ambassador Victor Camilleri (Malta) (on transfer)
- Ms. Magda Kopczynska (European Commission) (on transfer)
- Mrs. Janet Strode (IPTA) (on retirement)
- Captain Moin Ahmed (IMSO, Director-General) (on retirement)
- Mr. David Taylor (Ireland) (on retirement)
- Ms. Annalisse Sly (Australia) (on transfer)
- Mr. Anas Suleiman (Nigeria) (on transfer)
- Mr. Ji-hyun Lim (Republic of Korea) (on transfer)
- Ms. Lucy Essuman (IMO) (on retirement)
- Ms. Katherine Yentumi (IMO) (on retirement)

15 CONSIDERATION OF THE REPORT OF THE COMMITTEE ON ITS SEVENTY-NINTH SESSION

Preparation of the final report

15.1 The draft report of the session (MEPC 79/WP.1 and MEPC 79/WP.1/Rev.1) was prepared by the Secretariat for consideration and adoption by the Committee.

15.2 During the hybrid meeting held on 16 December 2022, delegations were given an opportunity to provide comments on the draft report (MEPC 79/WP.1) and the Secretariat then prepared the revised draft report (MEPC 79/WP.1/Rev.1). Member States and international organizations wishing to provide editorial corrections and improvements, including finalizing individual statements, were given a deadline of 20 January 2023, 23:59 (UTC) to do so by correspondence, in accordance with the Committees' revised Method of work (see paragraph 11.2).

15.3 By the above-mentioned deadline, no comments had been received, and the report of the Committee was finalized by the Secretariat in consultation with the Chair. The session was closed at 23.59 (UTC+1) on 20 January 2023, pursuant to rule 35 of the Rules of Procedure.

Action requested of other IMO organs

15.4 The Council, at its 129th session, is invited to:

- .1 consider the report of the seventy-ninth session of MEPC and, in accordance with Article 21(b) of the IMO Convention, transmit it, with any comments and recommendations, to the thirty-third session of the Assembly;
- .2 note the comments made and decisions taken on matters related to the ongoing military conflict between the Russian Federation and Ukraine and its effects on international shipping, the marine environment and seafarers (section 2);

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- .3 note that the Committee adopted amendments to MARPOL Annexes I, II, IV, V and VI, concerning regional reception facilities within Arctic waters, the Form of the IOPP Certificate and Supplements, the Garbage Record Book, information to be included in the bunker delivery note, information to be submitted to the IMO Ship Fuel Oil Consumption Database and the designation of a Mediterranean Sea Emission Control Area for Sulphur Oxides and Particulate Matter (section 3 and annexes 1 to 5);
- .4 note the action taken by the Committee on issues related to ballast water management, in particular the approval of draft amendments to appendix II of the Annex to the BWM Convention (Form of Ballast Water Record Book) for circulation, with a view to adoption by MEPC 80; the approval of a unified interpretation of paragraph 4.10 of the BWMS Code and a revised unified interpretation of regulation E-1.1.5 of the BWM Convention and the Form of the International Ballast Water Management Certificate; and the decision that the temporary storage of grey water or treated sewage in ballast tanks should be permitted (section 4 and annexes 6 and 7);
- .5 note the action taken by the Committee on issues related to air pollution prevention, in particular the approval of an updated unified interpretation clarifying the application of regulation 18.3 of MARPOL Annex VI for synthetic fuels (section 5 and annex 8);
- .6 note the action taken by the Committee on issues related to the energy efficiency of ships, in particular the adoption of the *2022 Guidelines on the method of calculation of the Attained Energy Efficiency Design Index (EEDI) for new ships* and the *2022 Guidelines on survey and certification of the Energy Efficiency Design Index (EEDI)*, the approval of unified interpretations clarifying the reporting of boil-off gas consumed on board ships in IMO DCS and on the development and verification of SEEMP Part III and the issuance of the Statement of Compliance for the first year, as well as an updated unified interpretation clarifying the requirements of EEDI data reporting (section 6 and annexes 9 and 10);
- .7 note the action taken by the Committee on issues related to the reduction of GHG emissions from ships, in particular the reaffirmation of its commitment to adopt a revised IMO GHG Strategy in all its elements, including with a strengthened level of ambition by MEPC 80; to continue its work on identifying the candidate GHG reduction measures to be developed in priority as part of a basket of measures consisting of both technical and economic elements by MEPC 80 in accordance with the work plan; and to undertake a comprehensive impact assessment of the basket of candidate measures ahead of their adoption in accordance with the work plan and the revised Procedure for assessing impacts on States; as well as the adoption of resolution MEPC.366(79) on *Invitation to Member States to encourage voluntary cooperation between the port and the shipping sectors to contribute to reducing GHG emissions from ships* and resolution MEPC.367(79) on *Encouragement of Member States to develop and submit voluntary National Action Plans (NAPs) to address GHG emissions from ships* (section 7 and annexes 11 and 12);
- .8 note the action taken by the Committee on issues related to follow-up work emanating from the Action Plan to Address Marine Plastic Litter from Ships, in particular the Committee's agreement to revise points 1 and 2 of the terms

- of reference for the Study and adopt a stepwise approach by pursuing sub-projects that address specific data gaps (e.g. by region, by industry, by ship type or by type of litter) (section 8);
- .9 note the action taken by the Committee on the remaining outcome of HTW 8 concerning the approval, concurrently with MSC 106, of amendments to the *Guidelines for the development, review and validation of model courses* (MSC-MEPC.2/Circ.15/Rev.1), providing new appendices 4 and 5 on Action verb taxonomy for model courses and Guidance on learning outcomes, respectively (paragraph 9.1);
- .10 note the action taken by the Committee on the outcome of SSE 8 concerning the adoption of amendments to the *2014 Standard specification for shipboard incinerators* (resolution MEPC.244(66)) that removed the discrepancies between resolution MEPC.244(66) and SOLAS chapter II-2 in relation to fire protection requirements for incinerators and waste stowage spaces (paragraph 9.2 and annex 13);
- .11 note the action taken by the Committee on the outcome of III 8, concurrently with MSC 106 where relevant, in particular with regard to the review by the Secretariat of the full functionality and interoperability of the Port Reception Facilities (PRF) module in GISIS; the process for updating the Survey Guidelines under the Harmonized System of Survey and Certification (HSSC); and the authorization of III 9 to report the outcome of its work, which would require the adoption of Assembly resolutions, directly to A 33 (paragraphs 9.4, 9.9 to 9.11 and 9.13 to 9.14);
- .12 note that the Committee agreed in principle to the designation of a PSSA in the North-Western Mediterranean Sea (section 10);
- .13 note that the Committee, in concurrence with the decision by MSC 106, approved the amendments to the *Organization and method of work of the Maritime Safety Committee and the Marine Environment Protection Committee and their subsidiary bodies* (MSC-MEPC.1/Circ.5/Rev.3), regarding the introduction of a five working day period for commenting on the draft report and generally not introducing documents in plenary (section 11);
- .14 endorse the new outputs on "Amendments to MARPOL Annex II in order to improve the effectiveness of cargo tank stripping, tank washing operations and prewash procedures for products with a high melting point and/or high viscosity" and "Revision of the Revised guidelines and specifications for pollution prevention equipment for machinery space bilges of ships (resolution MEPC.107(49))", for inclusion in the post-biennial agenda of the Committee, assigning the PPR Sub-Committee as the associated organ (paragraphs 12.4 and 12.8);
- .15 endorse the renaming of output 7.5 as "Identified issues relating to the implementation of IMO instruments from the analysis of data" (paragraph 12.14);
- .16 note the status report of the outputs of MEPC for the 2022-2023 biennium (paragraph 12.15 and annex 14);

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- .17 note that the Committee approved the items to be included in the provisional agenda of MEPC 80 (paragraph 12.16 and annex 15); and
- .18 note that the Committee elected Dr. Harry Conway (Liberia) as Chair and Mr. Hanqiang Tan (Singapore) as Vice-Chair, both for 2023 (paragraph 13.1).
- 15.5 The Maritime Safety Committee, at its 107th session, is invited to:
- .1 note the comments made and decisions taken on matters related to the ongoing military conflict between the Russian Federation and Ukraine and its effect on international shipping, the marine environment and seafarers (paragraphs 2.8 to 2.13);
- .2 note that the Committee adopted resolution MEPC.362(79) on amendments to MARPOL Annex VI, concerning, inter alia, information on flashpoint to be included in the bunker delivery note (paragraphs 3.35 to 3.38; and annex 4);
- .3 note that the Committee, with regard to licensing schemes for bunker suppliers, having noted information submitted by industry and the relevant discussions in the Working Group on Air Pollution and Energy Efficiency, encouraged Member States to make use of the revised *Guidance for best practice for Member State/coastal State* set out in circular MEPC.1/Circ.884/Rev.1 and invited interested Member States and international organizations to submit information on experience gained of the implementation of the guidance on best practice and relevant instruments to a future session of the Committee (paragraph 5.25);
- .4 note that the Committee took a decision concurrent with that of MSC 106 in approving the draft amendments to the *Guidelines for the development, review and validation of model courses* (paragraph 9.1);
- .5 note that the Committee adopted resolution MEPC.368(79) on *Amendments to the 2014 Standard specification for shipboard incinerators (resolution MEPC.244(66))* (paragraph 9.2 and annex 13);
- .6 note that the Committee took a decision concurrent with that of MSC 106 in approving the recommendation of III 8 to rename output 7.5 as "Identified issues relating to the implementation of IMO instruments from the analysis of data", thereby extending its scope (paragraph 9.6);
- .7 note that the Committee took a decision concurrent with that of MSC 106 with regard to the process of updating the Survey Guidelines under the HSSC (paragraph 9.9);
- .8 note that the Committee took a decision concurrent with that of MSC 106 in authorizing III 9 to report the outcome of its work on the finalization of draft Assembly resolutions directly to A 33 (paragraph 9.10);
- .9 note that the Committee took a decision concurrent with that of MSC 106 in requesting the Secretariat to provide a list of relevant e-learning courses under the remit of each sub-committee to assist in their prioritization by the sub-committees in relation to the implementation of instruments other than the STCW Convention, taking into account the List of IMO Model Courses set out in annex 7 to document III 8/19, but not limited to the courses in the list (paragraph 9.15);

- .10 note that the Committee (paragraph 10.10), following a review of document MEPC 79/10 (France, Italy, Monaco and Spain) proposing the designation of a PSSA in the North-Western Mediterranean Sea:
 - .1 agreed, in principle, to the designation of the North-Western Mediterranean Sea as a PSSA, subject to the further development and approval of the proposed associative protective measures by the appropriate sub-committee or committee;
 - .2 agreed to inform NCSR as the appropriate sub-committee responsible for addressing the particular associated protective measures proposed for the area of the outcome of this assessment; and
 - .3 invited the co-sponsors of document MEPC 79/10 to further develop the proposed associated protective measures and submit to NCSR as the appropriate sub-committee for approval, inform the Committee once the associated protective measures had been approved, and invite the Committee to designate the area as a PSSA at a future session;
 - .11 note that the Committee took a decision concurrent with that of MSC 106 in approving amendments to the *Organization and method of work of the Maritime Safety Committee and the Marine Environment Protection Committee and their subsidiary bodies* (MSC-MEPC.1/Circ.5/Rev.3) (paragraph 11.2); and
 - .12 note that the Committee took a decision concurrent with that of MSC 106 in approving the biennial status reports of the CCC and III Sub-Committees and the provisional agendas for CCC 9 and III 9 (paragraphs 12.10 to 12.15).
- 15.6 The Legal Committee, at its 110th session, is invited to:
- .1 note the comments made and decisions taken on matters related to the ongoing military conflict between the Russian Federation and Ukraine and its effects on international shipping, the marine environment and seafarers (paragraphs 2.8 to 2.13); and
 - .2 note the amendments to the *Organization and method of work of the Maritime Safety Committee and the Marine Environment Protection Committee and their subsidiary bodies* (MSC-MEPC.1/Circ.5/Rev.3) (paragraphs 11.1 and 11.2).
- 15.7 The Facilitation Committee, at its forty-seventh session, is invited to:
- .1 note the comments made and decisions taken on matters related to the ongoing military conflict between the Russian Federation and Ukraine and its effect on international shipping, the marine environment and seafarers (paragraphs 2.8 to 2.13); and
 - .2 note the amendments to the *Organization and method of work of the Maritime Safety Committee and the Marine Environment Protection Committee and their subsidiary bodies* (MSC-MEPC.1/Circ.5/Rev.3) (paragraphs 11.1 and 11.2).

15.8 The Technical Cooperation Committee, at its seventy-third session, is invited to:

- .1 note that the Committee adopted the amendments to MARPOL Annex VI concerning the designation of a Mediterranean Sea Emission Control Area for Sulphur Oxides and Particular Matter, which shall enter into force on 1 May 2024 (paragraphs 3.32 and 3.33); and in that context note that the importance of non-Parties within the Mediterranean region to ratify MARPOL Annex VI prior to the entry into force of the amendments was highlighted so as to ensure uniform implementation of new requirements (paragraph 3.12);
- .2 note that the Committee, having noted that ISWG-GHG 13 had finalized its lessons-learned exercise of the comprehensive impact assessment of the short-term GHG reduction measure, approved MEPC.1/Circ.885/Rev.1 on *Revised procedure for assessing impacts on States of candidate measures* (paragraphs 7.26 and 7.27);
- .3 note that the Committee reaffirmed its commitment to adopt a revised IMO GHG Strategy in all its elements, including with a strengthened level of ambition by MEPC 80; to continue its work on identifying the candidate GHG reduction measures to be developed in priority as part of a basket of measures consisting of both technical and economic elements by MEPC 80 in accordance with the work plan; and to undertake a comprehensive impact assessment of the basket of candidate measures ahead of their adoption in accordance with the work plan and the revised Procedure for assessing impacts on States (paragraph 7.21); and
- .4 note that the Committee adopted resolution MEPC.366(79) on *Invitation to Member States to encourage voluntary cooperation between the port and the shipping sectors to contribute to reducing GHG emissions from ships* and resolution MEPC.367(79) on *Encouragement of Member States to develop and submit voluntary National Action Plans (NAPs) to address GHG emissions from ships* (paragraph 7.74 and annexes 11 and 12).

(The annexes to this report have been issued as document MEPC 79/15/Add.1)