

MARITIME ENVIRONMENT PROTECTION COMMITTEE 78th session Agenda item 17

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

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1 INTRODUCTION – ADOPTION OF THE AGENDA

1.1 The seventy-eighth session of the Marine Environment Protection Committee was held remotely from 6 to 10 June 2022. Owing to unforeseen circumstances, Mr. H. Saito (Japan), who was re-elected as the Chair of the Committee at its last session, was not available to chair this session. In accordance with rule 19 of the Rules of Procedure of MEPC, Mr. H. Conway (Liberia), who was re-elected as the Vice-Chair of the Committee at its last session, chaired this session.

1.2 The session was attended by 122 Members and 3 Associate Members; 4 representatives from the United Nations Programmes, specialized agencies and other entities; 7 observers from intergovernmental organizations with agreements of cooperation; and 50 observers from non-governmental organizations in consultative status, as listed in document MEPC 78/INF.1.

Opening address of the Secretary-General

1.3 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-GeneralsSpeeches ToMeetings.aspx

Chair's remarks

1.4 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.

Measures taken to facilitate the remote session

1.5 The Committee recalled that at the extraordinary session of all IMO Committees (ALCOM/ES), held in September 2020, the Committees had jointly approved *Interim guidance* to facilitate remote sessions of the Committees during the COVID-19 pandemic (MSC-LEG-MEPC-TCC-FAL.1/Circ.1), and had agreed in particular to:

- .1 waive rule 3 of their respective rules of procedure, in part, to allow sessions to be held remotely;
- .2 accept, for the purpose of facilitating remote sessions, electronically submitted credentials, with originals to follow; and
- .3 consider Members that had submitted valid credentials, were registered at OMRS and were listed as participants in the remote session, as "present" within rule 28(1) of its rules of procedure.

Adoption of the agenda and related matters

1.6 The Committee adopted the agenda (MEPC 78/1) and agreed to be guided in its work by the provisional timetable (MEPC 78/1/1, annex 1, as amended).

1.7 The Committee noted document MEPC 78/1/1 (Chair) setting out the proposals by the Chair, in consultation with the Secretariat, with regard to arrangements for the remote session, taking into account the *Interim guidance to facilitate remote sessions of the Committees during the COVID-19 pandemic.*

1.8 The Committee generally agreed to the Chair's proposals on the arrangements for the remote session as set out in documents MEPC 78/1/1 and MEPC 78/1/1/Add.1(Chair).

1.9 In this context, the Committee further agreed to the Chair's proposals in relation to the documents considered by correspondence prior to the virtual meeting (MEPC 78/1/1, annex 3), having noted document MEPC 78/1/1/Add.1 providing a collation of all comments received by correspondence and explanations on how these comments had been addressed. The Committee noted that the above-mentioned Chair's proposals would be reflected under relevant agenda items.

1.10 The Committee also generally agreed to defer the consideration of the documents listed in annex 4 to document MEPC 78/1/1 to MEPC 79.

Credentials

1.11 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 LC 43/LP 16 (MEPC 78/2), TC 71 (MEPC 78/2/1), MSC 104 (MEPC 78/2/2), A 32 and C/ES.34 (MEPC 78/2/3) and C/ES.35 (MEPC 78/2/4) with regard to its work, agreed to take action as appropriate as indicated below.

Outcome of MSC 104

2.2 The Committee noted that MEPC 77 had addressed all action points in paragraph 2 of document MEPC 78/2/2 and the outcome was set out in document MEPC 77/16.

Outcome of A 32 and C/ES.34

2.3 The Committee considered the request by A 32 to MSC and MEPC to consider the Consolidated Audit Summary Report (CASRs) containing lessons learned from seven mandatory audits completed in 2019 and 2020 (Circular Letter No.4442) and, in due course, to advise the Council of the outcome of their consideration.

2.4 Following consideration, the Committee, concurrently with MSC 105, instructed the III Sub-Committee to consider the CASRs completed in 2019 and 2020 and report to the Committees the outcome of its consideration.

Ongoing armed conflict between the Russian Federation and Ukraine and its effects on international shipping and the marine environment

2.5 The Committee, in considering the outcome of C/ES.35 (MEPC 78/2/4), noted that the Council, having considered the impacts of the ongoing armed conflict between the Russian Federation and Ukraine on shipping and seafarers, had:

.1 requested IMO committees to consider ways to enhance the efforts of Member States and observer organizations in supporting affected seafarers and commercial vessels and consider the implications of this situation for the implementation of the Organization's instruments, to take appropriate action and report back to the Council;

- .2 agreed to encourage the establishment, as a provisional and urgent measure, of a blue safe maritime corridor to allow the safe evacuation of seafarers and ships from the high-risk and affected areas in the Black Sea and the Sea of Azov to a safe place in order to protect the life of seafarers, ensure the mobilization and commercial navigation of vessels intending to use this corridor by avoiding military attacks and protecting and securing the maritime domain; and
- .3 invited the Secretary-General to collaborate with the relevant parties and take necessary immediate actions to initiate the establishment and support the implementation of a blue safe maritime corridor in the Black Sea and the Sea of Azov and keep Member States informed of developments and to report to a future session of the Council.

2.6 In this regard, the Committee noted information provided by the Secretary-General on action taken following C/ES.35, in particular that he had written to the Ministers of Foreign Affairs of the Russian Federation and Ukraine, and to the littoral States, to share ideas on the establishment of a blue safe maritime corridor and that the Russian Federation had subsequently informed of the establishment of two humanitarian corridors to provide for the safe evacuation of ships from the territorial waters of Ukraine; but that, despite this initiative, there remained many safety and security issues which hampered access to the corridor and the ability for ships to depart from their berths in Ukrainian ports. He advised that Ukraine had also provided their preconditions for the safe evacuation of ships from their ports, including an end to hostilities, the withdrawal of troops and ensuring the freedom of navigation in the Black Sea and the Sea of Azov, and carrying out minesweeping activities with the involvement of Black Sea littoral States.

2.7 The Committee also noted information by the Special Advisor to the Secretary-General on Maritime Security, providing an update on the situation and the actions IMO had been taking to support ships and seafarers affected by the armed conflict.

2.8 The Committee noted that following the request of the Council, LEG 109, MSC 105 and FAL 46 had considered the impact on shipping and seafarers of the ongoing armed conflict between the Russian Federation and Ukraine. In this context, the Committee noted that LEG 109 had, inter alia:

- .1 included a new sub-item on the "Impact on shipping and seafarers of the situation in the Black Sea and the Sea of Azov" in the agenda of the Legal Committee under its existing agenda item on "Advice and guidance in connection with the implementation of IMO instruments"; and
- .2 approved Guidance on the impact of the situation in the Black Sea and the Sea of Azov on insurance or other financial security certificates (LEG.1/Circ.12), providing guidance on the implementation of IMO's liability and compensation conventions, and in particular on insurance certificates issued pursuant to these conventions.
- 2.9 The Committee noted that MSC 105 had, inter alia:
 - .1 urged the Secretary-General and the Secretariat to continue its efforts regarding the establishment of safe maritime corridors and the safe evacuation of seafarers from the affected area as a priority;
 - .2 invited the Council to:

- .1 address the issues raised in paragraph 14 of document MSC 105/18/3, in particular the consideration and analysis of reports on State's armed interference in maritime shipping, including ships, ports and shipping security systems, and the development of guidance relating to the prevention of such interference; and
- .2 consider the need for including any procedural matters in the conduct of audits under IMSAS, in relation to the proposal for auditors to take into account information provided by other coastal States relating to the adjacent marine areas, in the context of the revision of the *Framework and Procedures for the IMO Member State Audit Scheme* (resolution A.1067(28)), possibly through establishing the Joint Working Group on the Member State Audit Scheme (JWGMSA); and
- .3 adopted resolution MSC.495(105) on Actions to facilitate the urgent evacuation of seafarers from the war zone area in and around the Black Sea and the Sea of Azov as a result of the Russian Federation aggression against Ukraine.
- 2.10 The Committee noted that FAL 46 had, inter alia:
 - .1 noted the recent decision of the thirty-fifth extraordinary session of the IMO Council and the adoption of resolution MSC.495(105) by MSC 105, which strongly condemned the Russian Federation's invasion of Ukraine that had started on 24 February 2022, and expressed grave concern regarding its impact on global shipping, safety and security of navigation in the Black Sea and the Sea of Azov and on the maritime community;
 - .2 expressed concern about the consequences of the Russian Federation's attempted annexation of Crimea in 2014 for the implementation of the FAL Convention in the maritime areas of the Black Sea, the Sea of Azov and the Kerch Strait;
 - .3 urged the Russian Federation to refrain from harassing commercial ships, as well as seafarers, and restricting international navigation in the Black Sea, the Sea of Azov and the Kerch Strait both for commercial ships sailing to and from ports of Ukraine and for government ships sailing under various flags, which further exacerbated tensions in the region and beyond; and
 - .4 resolved to keep this matter under review and invited Member States concerned to provide relevant reports to the Committee.

2.11 The Committee, having recalled the earlier statements by the Secretary-General and his Special Advisor (see paragraphs 2.6 and 2.7) informing the Committee of the action taken to address the situation, noted, inter alia, the following views:

- .1 the aggression by the Russian Federation against Ukraine, which threatened Ukraine's territorial integrity and sovereignty, including its territorial waters, was condemned;
- .2 the ongoing armed aggression was a breach of international law and the UN Charter, undermined global security and stability, and caused massive loss of life and injury to civilians;

- .3 solidarity with Ukraine and its people was expressed;
- .4 the Russian Federation had failed to uphold its responsibilities as a full-time member of the UN Security Council;
- .5 concerns relating to the impact of the ongoing armed aggression by the Russian Federation against Ukraine on the safety and security of navigation, merchant shipping, lives of seafarers, the protection of the marine environment, global supply chains and food security were expressed;
- .6 the ongoing armed aggression by the Russian Federation, which included attacks on commercial ships, ports and other critical infrastructure located on shore, threatened the marine environment, particularly in the Black Sea and the Sea of Azov;
- .7 C/ES.35 had requested relevant IMO Committees to consider the implications of the ongoing conflict for the implementation of IMO instruments, and therefore the Committee should exhaustively consider the implications for the marine environment; and
- .8 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.

2.12 The full text of statements made by the delegations of Australia, Canada, France (supported by Belgium, Croatia, Cyprus, Denmark, Estonia, Finland, Germany, Greece, Iceland, Ireland, Italy, Japan, Latvia, Luxembourg, Malta, the Netherlands, Poland, Portugal, the Republic of Korea, Slovenia, Spain, Sweden and the European Commission), Finland, Georgia, Italy, Spain, Ukraine, the United Kingdom and the United States is set out in annex 28.

2.13 On the basis of the support of the delegations who spoke, the Committee took the following actions:

- .1 noted the recent decision of the thirty-fifth extraordinary session of the IMO Council and the adoption of resolution MSC.495(105) by MSC 105, which strongly condemned the Russian Federation's invasion of Ukraine that had started on 24 February 2022, and expressed grave concern regarding its impact on global shipping, safety and security of navigation in the Black Sea and the Sea of Azov and on the maritime community;
- .2 further noted the discussions held during PPR 9, which highlighted the impacts of the Russian Federation's armed aggression against Ukraine in the Black Sea and the Sea of Azov on the marine environment;
- .3 reaffirmed in this regard its strong commitment to the full implementation of the Sustainable Development Goals (SDGs) to ensure the sustainable use of the oceans and seas and the protection of marine and coastal ecosystems;
- .4 expressed concern about the consequences of the Russian Federation's attacks directed at peaceful commercial vessels, including **MV Millennial Spirit**, **MV Helt**, **MV Azburg** and other ships that sustained damage, which ended in spillage of substances harmful to the marine environment;

- .5 stressed in this regard the critical importance of protecting the environment in times of war, including in compliance with the relevant international obligations under international humanitarian law;
- .6 urged the Russian Federation to refrain from attacks aimed at commercial ships and critical port infrastructure, which might result in the pollution of marine areas from oil, chemicals and other harmful substances; and
- .7 resolved to keep this matter under review and invited Member States concerned to provide relevant reports to the Committee.

2.14 The delegation of the Russian Federation specifically requested the following points be included in the report:

- .1 The conclusions of the Committee should be based in fact and supported by evidence and could not be built upon allegations of one or several States. Futile accusations in undermining safety and security at sea in the Azov and Black Seas, in particular the shelling of commercial vessels, had been rebutted as unfounded. Instead, it was indicated that existing facts lead to the conclusion that it was the Ukrainian side that employed the strategy of bombing innocent vessels and people.
- .2 It was stressed that in sizing up the current situation, the responsibility and the involvement of all Parties should be duly assessed. The lopsided character of the Committee's outcomes in tackling this issue was inadmissible and was vividly demonstrated through statements where blame was expressly put only on one Party, while the actions of other Parties involved were equally expressly omitted.
- .3 On the example of allegations in distorting supply chains, especially food supply chains, it had been demonstrated that this stemmed not from the actions of the Russian Federation but rather as a result of massive illegal unilateral restrictive measures undertaken against the Russian Federation.
- .4 The efforts of the IMO Secretary-General and the IMO Secretariat had been commended in facilitating the designation of blue safe maritime corridors in the Sea of Azov and Black Seas. The Committee had been informed of the newly established humanitarian corridor in the Sea of Azov for the safe departure of vessels from the port of Mariupol and the amendment in the route of the earlier established humanitarian corridor in the Black Sea due to security considerations.
- 2.15 As requested, the full statement by the Russian Federation is set out in annex 28.

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 Annex I concerning watertight doors;
 - .2 MARPOL Annex II related to the revised GESAMP Hazard Evaluation Procedure; and

.3 the IBC Code concerning watertight doors.

3.2 The Committee noted that the text of the aforementioned amendments had been circulated, in accordance with articles 16(2)(a) of MARPOL, to all IMO Members and Parties to MARPOL by Circular Letter No.4487 of 29 November 2021.

3.3 The Committee recalled that under agenda item 1 it had established a 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 Annex I and the IBC Code concerning watertight doors

3.4 The Committee recalled that MEPC 77 had considered approved draft amendments to MARPOL Annex I and the IBC Code concerning watertight doors, as set out in documents MEPC 78/3 and MEPC 78/3/2, respectively, with a view to adoption at this session.

3.5 The Committee considered commenting document MEPC 78/3/3 (China) proposing further modifications to the above-mentioned draft amendments aimed at harmonizing the texts of respective draft amendments to MARPOL Annex I and the IBC Code concerning watertight doors.

3.6 A number of delegations that took the floor noted that the changes proposed by China in document MEPC 78/3/3 were of a substantive nature and that some of the differences identified between the draft amendments to MARPOL Annex I and the IBC Code related to watertight doors were in fact deliberate, the result of carefully considered text that had been negotiated at length within the SDC Sub-Committee.

3.7 Specific reference was made to the inclusion of the word "final" before the word "waterline" at the beginning of paragraph 3.1 of regulation 28 of MARPOL Annex I, which was not present at the beginning of paragraph 2.9.2.1 of chapter 2 of the IBC Code. It was confirmed by those that took the floor that this difference was intentional for technical reasons and therefore should not be modified. It was further highlighted that any changes made to these amendments would have unintended consequences with respect to other instruments with similar wording related to watertight doors, such as SOLAS, the Load Lines Convention and the IGC Code.

3.8 As a consequence, the Committee agreed that the proposals set out in document MEPC 78/3/3 could not be taken into account when finalizing the text of the amendments.

3.9 Having confirmed the contents of the requisite resolutions to MARPOL Annex I and the IBC Code, the Committee agreed that the entry-into-force date of the amendments to MARPOL Annex I would be 1 January 2024, and of those to the IBC Code, 1 July 2024.

3.10 Having decided on the proposals to the draft amendments, the Committee instructed the Drafting Group to prepare the final texts of the requisite MEPC resolutions, together with the amendments to the MARPOL Annex I and the IBC Code, taking into account the decisions taken in plenary, for the Committee's consideration and adoption.

Draft amendments to MARPOL Annex II, appendix I

3.11 The Committee recalled that MEPC 77 had approved draft amendments to appendix I to MARPOL Annex II related to the Abbreviated legend of the revised GESAMP Hazard Evaluation Procedure, as contained in document MEPC 78/3/1, with a view to adoption at this session.

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

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 II would be 1 November 2023 and instructed the Drafting Group to prepare the final text of the requisite MEPC resolution, together with the amendments to MARPOL Annex II, for the Committee's consideration and adoption.

Establishment of the Drafting Group on Amendments to Mandatory Instruments

3.14 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 prepare:

- .1 the final text of the draft amendments to MARPOL Annex I concerning watertight doors, using document MEPC 78/3 as the basis;
- .2 the final text of the draft amendments to MARPOL Annex II related to the revised GESAMP Hazard Evaluation Procedure, using document MEPC 78/3/1 as the basis; and
- .3 the final text of the draft amendments to the IBC Code concerning watertight doors, using document MEPC 78/3/2 as the basis.

Report of the Drafting Group

3.15 Having considered the report of the Drafting Group (MEPC 78/WP.7), the Committee approved it in general and took action as indicated below.

Amendments to MARPOL Annex I

3.16 The Committee considered the final text of the draft amendments to MARPOL Annex I concerning watertight doors (MEPC 78/WP.7, annex 1), and adopted the amendments by resolution MEPC.343(78), as set out in annex 1.

3.17 In adopting resolution MEPC.343(78), the Committee determined, in accordance with article 16(2)(f)(iii) of MARPOL, that the adopted amendments to MARPOL Annex I shall be deemed to have been accepted on 1 July 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 January 2024, in accordance with article 16(2)(g)(ii) of the Convention.

Amendments to MARPOL Annex II

3.18 The Committee considered the final text of the draft amendments to MARPOL Annex II related to the revised GESAMP Hazard Evaluation Procedure (MEPC 78/WP.7, annex 2), and adopted the amendments by resolution MEPC.344(78), as set out in annex 2.

3.19 In adopting resolution MEPC.344(78), the Committee determined, in accordance with article 16(2)(f)(iii) of MARPOL, that the adopted amendments to MARPOL Annex II shall be deemed to have been accepted on 1 May 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 November 2023, in accordance with article 16(2)(g)(ii) of the Convention.

Amendments to the IBC Code

3.20 The Committee considered the final text of the draft amendments to the IBC Code concerning watertight doors (MEPC 78/WP.7, annex 3), and adopted the amendments by resolution MEPC.345(78), as set out in annex 3.

3.21 In adopting resolution MEPC.345(78), the Committee determined, in accordance with article 16(2)(f)(iii) of MARPOL, that the adopted amendments to the IBC Code shall be deemed to have been accepted on 1 January 2024 (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 July 2024, in accordance with article 16(2)(g)(ii) of the Convention.

Instructions to the Secretariat

3.22 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 which require action by the Parties to MARPOL.

4 HARMFUL AQUATIC ORGANISMS IN BALLAST WATER

MATTERS CONSIDERED BY CORRESPONDENCE PRIOR TO THE VIRTUAL MEETING

4.1 In accordance with the arrangements of the remote session, as outlined in document MEPC 78/1/1 (paragraphs 12 to 15) and its annex 3 (section 1 on agenda item 4), the Committee considered by correspondence, prior to the virtual meeting, the following documents:

- .1 MEPC 78/4/2 (paragraphs 41.2 to 41.5) (Secretariat), providing a summary of the outcome of the Ninth Stocktaking Workshop on the activity of the GESAMP-Ballast Water Working Group and in particular the list of actions requested of the Committee that were not to be considered during the virtual meeting;
- .2 MEPC 78/9/1 (paragraphs 2.6 and 2.26) (Secretariat), providing the list of actions requested of the Committee on matters emanating from PPR 9 related to ballast water management and in particular those actions that were not to be considered during the virtual meeting;
- .3 MEPC 78/INF.2 (Norway), providing information on the type approval of the CleanBallast® Ocean Barrier System ballast water management system;
- .4 MEPC 78/INF.6 (Norway), providing information on the amendment of the type approval of the Ecochlor® ballast water management system; and
- .5 MEPC 78/INF.8 (France), providing information on the type approval of the BIO-SEA® BWTS ballast water management system manufactured by BIO-UV Group.

4.2 During the virtual meeting, the Committee reconfirmed the endorsement of the Chair's proposals in annex 3 to document MEPC 78/1/1, as set out in the following paragraphs 4.3 to 4.9.

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

4.3 The Committee endorsed the GESAMP-BWWG's encouragement of rigorous scientific studies based on reliable methods of total residual oxidant (TRO) measurement in variable natural waters.

4.4 The Committee also noted the GESAMP-BWWG's conclusion that it would recognize amperometric TRO sensors as practical alternatives to DPD colorimetric sensors for use in the online monitoring of TRO in future BWMS applications, provided the method used was part of a control system which reliably monitored and regulated the TRO dose during the uptake of ballast water and also controlled the neutralizer dose at discharge to maintain the maximum allowable discharge concentration (MADC) at all times.

4.5 In addition, the Committee endorsed the GESAMP-BWWG's recommendation that, when amperometric sensors were employed in a BWMS, there should be a manual DPD meter provided for the periodic verification of the effective operation of such sensors to control the appropriate TRO concentrations.

4.6 Furthermore, the Committee noted the GESAMP-BWWG's conclusion that bacteria should not be introduced as a new test organism at this time.

Type approval of ballast water management systems

4.7 The Committee noted the information regarding type-approved ballast water management systems provided in documents MEPC 78/INF.2 and MEPC 78/INF.6 (Norway), and MEPC 78/INF.8 (France).

Matters arising from PPR 9

4.8 The Committee approved the revised *Guidance on methodologies that may be used* for enumerating viable organisms for type approval of ballast water management systems, and requested the Secretariat to disseminate it by means of BWM.2/Circ.61/Rev.1.

4.9 The Committee noted that the Sub-Committee, having considered document MEPC 77/4/11 (IACS) and a commenting document, could not agree to a unified interpretation of regulation B-3 of the BWM Convention. The observer from IACS advised the Committee that IACS was considering submitting a document to a future session of the PPR Sub-Committee to continue looking for unanimity of the approach for the benefit of consistent application of this mandatory requirement.

MATTERS CONSIDERED DURING THE VIRTUAL MEETING

4.10 The Committee recalled that the Ballast Water Review Group was expected to be established at this session with proposed terms of reference as set out in document MEPC 78/WP.2.

4.11 During the virtual meeting, the Committee considered documents, both deferred by MEPC 76 and MEPC 77, and submitted to this session, addressing the following issues:

- .1 the experience-building phase associated with the BWM Convention (EBP), including consideration of the data analysis report and the way forward towards the Convention review stage;
- .2 application of the BWM Convention to ships operating at ports with challenging water quality;

- .3 proposals for amendments to the BWM Convention or its associated guidelines, relating to the temporary storage of treated sewage and grey water in ballast tanks, the form of the Ballast Water Record Book, the example ballast water reporting form, and the application of the BWM Convention to specific ship types; and
- .4 other matters relating to ballast water management, including outcomes of PPR 9 and the Ninth Stocktaking Workshop of the GESAMP-BWWG.

4.12 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 78/WP.2, following initial discussion in plenary to provide overall direction to the Group, focusing on the following points:

- .1 the EBP data analysis report and the way forward taking into account the proposed Convention Review Plan; and
- .2 any specific comments related to the application of the BWM Convention to ships operating at ports with challenging water quality, and to any of the other proposals for amendments to the BWM Convention or its associated guidelines, that delegations preferred to highlight in plenary.

The experience-building phase associated with the BWM Convention

4.13 The Committee recalled that MEPC 71 had established the EBP through resolution MEPC.290(71), and MEPC 72 had approved the related data gathering and analysis plan (DGAP), which had later been revised by MEPC 74 (BWM.2/Circ.67/Rev.1). The Committee also recalled that, to support and complement the EBP, the Secretariat had engaged the World Maritime University (WMU) to gather and analyse data and prepare the data analysis report, and Administrations and stakeholders wishing to submit data related to the EBP had been encouraged to liaise with WMU.

- 4.14 The Committee had for its consideration the following documents:
 - .1 MEPC 78/4/1 (Secretariat), providing the data analysis report on the EBP and highlighting the main points identified during the data analysis;
 - .2 MEPC 78/4/10 (Australia et al.), proposing that a plan be adopted to guide the holistic review of the BWM Convention which was agreed as part of the EBP, and that the Committee develop a Convention Review Plan (CRP), which could take into account the data analysis report (MEPC 78/4/1), establish a clear scope for a feasible Convention review based upon clear principles to promote Convention practicality and protectiveness, focus attention on priority issues, ensure holistic consideration of the Convention's policy balance, and update the timeline for completing the EBP;
 - .3 MEPC 78/4/11 (Japan), commenting on document MEPC 78/4/1 and providing the results of a study on the annual amount of problems with ballast water management systems (BWMS) on board ships between 2018 and 2021, noting that the number of problems per ship had decreased in 2020-2021 compared to 2018-2019 and proposing that this improvement should be noted for the future discussions on the review of the BWM Convention;

- .4 MEPC 78/INF.11 (Global TestNet), summarizing information the Global TestNet members had produced over the previous five years that might be useful in evaluating the data gathered during the EBP;
- .5 MEPC 77/4/3 (Canada), sharing the results of scientific research on BWMS performance, as well as experience with potential approaches for compliance assessment during port State control in Canada, and suggesting that areas of focus for the data analysis and Convention review stages of the EBP should include increasing the performance and reliability of current BWMS and improving the practicality of compliance assessment and enforcement;
- .6 MEPC 77/4/7 (ICS et al.), proposing, based on the update that the Secretariat had provided to MEPC 76, to extend the EBP in order to provide sufficient time for the various stages of the EBP to be effective and ensure follow-up decisions relating to a review of the BWM Convention were meaningful and based on sufficient feedback and data; and
- .7 MEPC 77/4/10 (Brazil) (except paragraph 15), presenting the status of ongoing studies in Brazil during the EBP regarding the implementation of the D-2 standard, including the results of a survey relating to the training of inspectors, entailing inspections conducted on a ship that had performed ballast water exchange (BWE) exclusively and on a ship that had performed both BWE and ballast water treatment (BWT).

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

4.15 The Committee recalled that MEPC 77 had invited Member States and international organizations to submit further proposals with regard to guidance on measures that might be taken when BWMS encountered challenging uptake water quality, taking into account the fundamental elements established at that session as set out in annex 2 to the Ballast Water Review Group's report (MEPC 77/WP.10).

- 4.16 The Committee had for its consideration the following documents:
 - .1 MEPC 78/4/3 (BEMA), proposing amendments to update the *Guidance on contingency measures under the BWM Convention* (BWM.2/Circ.62) to reflect implementation experience gained and to provide a mechanism to address the need for guidance related to ships operating at ports with challenging water quality (PCWQ), and proposing that revising the existing guidance in BWM.2/Circ.62, which already contained guidance on the steps to be taken when a ship had improperly managed ballast water, was a practical way forward;
 - .2 MEPC 78/4/6 (Republic of Korea), providing a discussion of fundamental elements regarding guidance on measures that might be taken when BWMS encountered challenging uptake water quality and proposing to amend BWM.2/Circ.62, in order to facilitate ships operating at PCWQ conditions and to contain the purpose and proposed approaches for guidance on PCWQ as discussed at MEPC 77;
 - .3 MEPC 78/4/8 (China), providing elements for further consideration for employing ballast water exchange plus treatment (BWE+BWT) as an approach of ballast water management to ensure consistent implementation of the BWM Convention, and proposing that several factors outlined in the

document be included in the guidance on BWM Convention compliance for ships operating at PCWQ;

- .4 MEPC 78/4/12 (Liberia et al.), presenting further considerations on actions to be taken by ships and flag Administrations when a ship visited a PCWQ, and proposing, inter alia, that this issue be treated separately from BWM.2/Circ.62 and that the relevant fundamental elements set out in annex 2 to document MEPC 77/WP.10 be updated;
- .5 MEPC 78/4/14 (India), providing comments in support of documents MEPC 78/4/8 and MEPC 78/4/6 and additional justification on the BWE+BWT application as a contingency measure, and proposing that BWE+BWT should be seen as the best acceptable alternative that should be standardized clearly identifying the area for BWE, and that the contingency measures should be based on historical data/experience of a given ship at the same port and guidance from the local authority duly considering the variation in water quality over time;
- .6 MEPC 78/INF.17 (INTERTANKO), presenting updated information on reports submitted by INTERTANKO members relating to ships that experienced issues with their BWMS at PCWQ, and providing quantitative information relating to the ongoing practical and operational challenges associated with using BWMS in PCWQ; and
- .7 MEPC 77/4/10 (Brazil), paragraph 15, commenting on the use of BWE+BWT in PCWQ, recommending the approval of guidance on this issue and supporting the proposal to perform BWE+BWT in an area designated by the port State within 12 nautical miles.

Other proposals for amendments to the BWM Convention or its associated guidelines

4.17 The Committee recalled that MEPC 77 had noted proposals to revise the form of the Ballast Water Record Book (BWRB) for further consideration at this session in conjunction with the EBP report, and had invited interested Member States and international organizations to work intersessionally and submit updated proposals on the application of the BWM Convention to specific ship types to this session.

- 4.18 The Committee had for its consideration the following documents:
 - .1 MEPC 78/4 (IACS), raising concerns about the temporary storage of treated sewage and grey water in ballast tanks and seeking clarification from the Committee on the permission of such practice under the BWM Convention, providing possible approaches to be considered if the permission of such practice was confirmed, including to develop either guidance on the temporary storage of grey water or treated sewage in ballast water tanks or amendments to MARPOL Annex IV and the BWM Convention;
 - .2 MEPC 78/4/4 (India), proposing a revised form for the recording of operations in the BWRB and expressing the view that there was a need to expedite the review and amendment of appendix II to the BWM Convention (Form of the Ballast Water Record Book) concerning the BWRB entries, taking into consideration the various operational practices while also dealing with PCWQ and other issues;

- .3 MEPC 78/4/7 (China), proposing to amend the example ballast water reporting form in the appendix to the 2017 Guidelines for ballast water exchange (G6), as set out in resolution MEPC.288(71), noting that there were differences in the relevant pre-arrival reporting requirements of various States and the report forms were complex, and proposing the usage of a unified example ballast water management reporting form;
- .4 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 amendments to regulation A-5 and the *Guidelines for ballast water management equivalent compliance* (G3);
- .5 MEPC 78/4/13 (India), providing comments on document MEPC 78/4, highlighting additional issues, proposing additional measures to resolve the issue raised in that document for further consideration by the Committee, expressing the opinion that there was a requirement to provide clear guidance on this issue due to the existence of different interpretations of the requirements and to establish a unified approach to the implementation of the BWM Convention and MARPOL Annex IV, and proposing to develop guidance for existing ships and amendments to MARPOL Annex IV and the BWM Convention for new ships;
- .6 MEPC 77/4/9 (India), highlighting the need to review appendix II to the BWM Convention concerning the BWRB entries, expressing the view that there was sufficient information available, and proposing to develop a revised BWRB as well as guidance on entries in the BWRB incorporating the above revision of the BWRB; and
- .7 MEPC 76/4/2 (Liberia et al.), discussing entries in the BWRB and proposing that the guidance provided in appendix II to the BWM Convention be reviewed as part of the EBP and that the review should identify any need for an improvement of the Convention in light of experience gained with the BWRB as part of the package of amendments following the conclusion of the EBP and consider whether additional guidance on entries in the BWRB was necessary.

Other matters relating to ballast water management

- 4.19 The Committee recalled that:
 - .1 MEPC 75 had requested GESAMP-BWWG to prepare draft guidelines for re-evaluations in cases where modifications had been made, for consideration by the Committee at a future session;
 - .2 regulation A-4 provided that exemptions shall be communicated to the Organization, while the Assembly had decided that the appropriate platform to accommodate such reporting requirements was the Global Integrated Shipping Information System (GISIS);
 - .3 PPR 9 had agreed to a unified interpretation of appendix I to the BWM Convention (Form of International Ballast Water Management

Certificate) and had invited the Committee to approve it for inclusion in a further revision of BWM.2/Circ.66 (i.e. BWM.2/Circ.66/Rev.3); and

- .4 MEPC 77 had instructed the Ballast Water Review Group to consider the proposal to develop procedures for re-evaluations of BWMS in cases where the recommendation of the GESAMP-BWWG might be challenged in the Committee at a future session.
- 4.20 The Committee had for its consideration the following documents:
 - .1 MEPC 78/4/2 (Secretariat), paragraph 41.1, inviting the Committee to consider the proposed guidelines for re-evaluations in cases where modifications have been made to a BWMS, as prepared by the Ninth Stocktaking Workshop on the activity of the GESAMP-Ballast Water Working Group, including a decision tree, as a potential addition to the *Methodology for information gathering and conduct of work of the GESAMP-Ballast Water Working Group*;
 - .2 MEPC 78/4/5 (Denmark and Sweden), providing information on the designation of Öresund as a Same Risk Area (SRA) and on relevant exemptions granted to ferries operating in Öresund, noting that it was not possible to register exemptions based on an SRA in GISIS as the related option was not operational, and highlighting the need to have the required functionality in GISIS to allow Administrations to fulfil the requirement to communicate the exemptions to the Organization through GISIS;
 - .3 MEPC 78/9/1 (Secretariat), paragraph 2.25, inviting the Committee to approve the draft unified interpretation of appendix I to the BWM Convention (Form of International Ballast Water Management Certificate), as agreed by PPR 9, for inclusion in a further revision of BWM.2/Circ.66 (i.e. BWM.2/Circ.66/Rev.3); and
 - .4 MEPC 78/9/2 (Canada), commenting on document MEPC 78/9/1 and providing considerations and proposed amendments to the draft unified interpretation of appendix I to the BWM Convention (Form of International Ballast Water Management Certificate).

Discussion during the virtual meeting

4.21 In the ensuing discussion, various views were expressed as set out in the following paragraphs 4.22 to 4.28.

The experience-building phase associated with the BWM Convention

4.22 There was overwhelming support in principle for the Convention Review Plan proposed in document MEPC 78/4/10 (Australia et al.) as the most effective way forward with a view to a holistic review of the BWM Convention. Some delegations supported the extension of data collection and analysis before initiating the convention review phase; however, most delegations supported the initiation of the convention review without delay and, in this regard, some delegations also highlighted that this next phase of the EBP could still entail the consideration of any further data and information.

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

4.23 The Committee agreed to the detailed consideration of this matter in the Ballast Water Review Group, noting that it was affecting ship operations and it required practical and implementable guidance. An overarching point was whether such situations should be considered as contingencies that could be addressed through a revision of the *Guidance on contingency measures under the BWM Convention* (BWM.2/Circ.62) or as operational matters to be addressed through new stand-alone guidance, on which the views were split with several delegations supporting each option. Moreover, some delegations supported the practice of ballast water exchange plus treatment (BWE+BWT) as a good approach in such situations while some delegations expressed the view that this practice should only be a last resort and conducted under certain criteria including the locations where ballast water exchange (BWE) could be undertaken.

4.24 In addition, several further relevant points and views were expressed in this connection, including the following:

- .1 in all cases the subsequent ballast water discharges should be compliant with the BWM Convention, including regulation D-2 when applicable to the ship;
- .2 exceedance of the BWMS' system design limitations (SDLs) should not in itself be a criterion for considering the water quality to be challenging;
- .3 attention should be paid to operations in areas with low water temperature or ice and where BWE might not be possible or allowed;
- .4 details of how such situations would be addressed should be documented in the ship's Ballast Water Management Plan and communicated to relevant parties in such situations; and
- .5 given that any relevant amendments to the BWM Convention would take time while guidance was urgently needed, such guidance should be developed at this stage while any amendments to regulations of the Convention should be considered under the convention review phase, during which this matter should be one of the main items of consideration.

Form of the Ballast Water Record Book

4.25 Some delegations expressed the view that the revision of this form should be addressed urgently as the current form did not provide sufficient clarity and this had an impact on the operation of ships. Other delegations, while agreeing with the need to review the form, supported the consideration of this matter under the convention review phase. All delegations who spoke on this matter supported the detailed consideration of this matter in the Ballast Water Review Group.

Temporary storage of treated sewage and grey water in ballast tanks

4.26 Diverse views were expressed on this matter, which was also highlighted as an issue affecting the operation of ships in practice. A few delegations expressed a view on whether this practice should be permitted or not, with no consensus on this point while some delegations noted that this practice was not prohibited by any convention. In addition, some delegations expressed concerns with regard to whether this practice would be consistent with

the BWM Convention, while some delegations also noted that it was not clear whether this matter should be addressed under the BWM Convention or under MARPOL Annex IV as had previously been agreed by MEPC 63.

4.27 Several delegations supported the development of guidance on this matter, with some delegations expressing the view that operational guidance would be more appropriate for existing ships, whereas any further measures, including amendments to MARPOL Annex IV or the BWM Convention and potentially entailing ship design requirements, should only be applicable to new ships. There was also general support for this matter to be considered in detail in the Ballast Water Review Group. A particular point raised by some delegations as requiring attention was related to the possible contamination of ballast tanks from the storage of liquids other than ballast water.

Application of the BWM Convention to specific ship types

4.28 Recognizing the very high workload of the Ballast Water Review Group and the need to focus on matters such as the EBP and those outlined in the previous paragraphs, the Committee agreed to defer consideration of document MEPC 78/4/9 (Russian Federation) to the next session.

Establishment of the Ballast Water Review Group

4.29 In light of the aforementioned discussions, the Committee noted that there was general support for the development of a Convention Review Plan as proposed in document MEPC 78/4/10 (Australia et al.) taking into consideration the data gathered during the experience-building phase. The Committee agreed that the Ballast Water Review Group should take into account comments related to the need to provide operational guidance to Member States on matters such as compliance with the D-2 standard of the BWM Convention at ports with challenging water quality, temporary storage of treated sewage and grey water in ballast tanks, and draft amendments to appendix II of the Annex to the BWM Convention (Form of Ballast Water Record Book), and structure its work accordingly.

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

- .1 consider the report on the experience-building phase (EBP) associated with the BWM Convention (MEPC 78/4/1) and advise the Committee on the way forward with regard to the EBP, using document MEPC 78/4/10 as the basis, taking into account the comments and information in documents MEPC 78/4/11, MEPC 78/INF.11, MEPC 77/4/3, MEPC 77/4/7 and MEPC 77/4/10 (except paragraph 15), and including consideration of whether some of the matters listed under term of reference .3 should be considered separately or as part of broader work under the EBP;
- .2 finalize the draft unified interpretation of appendix I to the BWM Convention (Form of International Ballast Water Management Certificate), for inclusion in a further revision of BWM.2/Circ.66 (i.e. BWM.2/Circ.66/Rev.3), using annex 13 to document PPR 9/21 as the basis and taking into account the comments in document MEPC 78/9/2;
- .3 consider the proposals contained in the following documents and advise the Committee accordingly, noting that some of these matters might be considered as part of broader work under the EBP:

- .1 MEPC 78/4 concerning the temporary storage of treated sewage and grey water in ballast tanks, taking also into account the comments in document MEPC 78/4/13;
- .2 MEPC 78/4/3, MEPC 78/4/6 and MEPC 78/4/8 concerning compliance with the D-2 standard of the BWM Convention at ports with challenging water quality, taking also into account the comments and information in documents MEPC 78/4/12, MEPC 78/4/14, MEPC 78/INF.17 and MEPC 77/4/10 (paragraph 15);
- .3 MEPC 78/4/4 concerning amendments to appendix II of the Annex to the BWM Convention (Form of Ballast Water Record Book), taking also into account the comments and information in documents MEPC 77/4/9 and MEPC 76/4/2;
- .4 MEPC 78/4/5 concerning exemptions under the Same Risk Area concept; and
- .5 MEPC 78/4/7 concerning amendments to the appendix of the 2017 Guidelines (G6) (Example ballast water reporting form);
- .4 finalize the guidelines for re-evaluations in cases where modifications had been made to a ballast water management system, using annex 4 to document MEPC 78/4/2 as the basis, for addition to the *Methodology for information gathering and conduct of work of the GESAMP-Ballast Water Working Group*; and
- .5 consider the proposal to develop procedures for conducting re-evaluations of ballast water management systems which made use of Active Substances in cases where the recommendation of the GESAMP-BWWG might be challenged in the Committee, and advise the Committee accordingly.

Report of the Ballast Water Review Group

4.31 Having considered the report of the Ballast Water Review Group (MEPC 78/WP.8), the Committee approved it in general and took action as outlined below.

The experience-building phase associated with the BWM Convention

4.32 The Committee agreed in principle to develop a BWM Convention Review Plan (CRP), using the text set out in the annex to document MEPC 78/4/10 as the basis for further intersessional work with a view to its finalization.

4.33 The Committee established a Correspondence Group on Review of the BWM Convention with the following terms of reference:

- .1 finalize the Convention Review Plan for the experience-building phase associated with the BWM Convention, using the annex to document MEPC 78/4/10 as the basis and taking into consideration:
 - .1 the outcome of the data gathering and analysis stages of the experience-building phase associated with the BWM Convention (MEPC 78/4/1) and the relevant documents, comments and discussions at MEPC 78;

- .2 operative paragraph 3 of resolution MEPC.252(67);
- .3 challenging uptake water quality for BWMS;
- .4 areas for improving BWMS performance and reliability, including crew training and maintenance;
- .5 the potential to verify BWMS performance outside of port State control; and
- .6 any other relevant matters that may be raised in the Correspondence Group; and
- .2 submit a report to MEPC 80.

4.34 In this regard, the Committee encouraged interested Member States and international organizations to contact the Coordinator¹ of the Correspondence Group, with a view to participating and contributing to the work of that Group.

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

4.35 The Committee invited interested Member States and international organizations to submit further proposals on the fundamental issues regarding challenging water quality identification, aspects of ballast water exchange plus treatment (BWE+BWT) and other such overarching issues relating to this matter.

Unified interpretation of appendix I to the BWM Convention

4.36 The Committee approved the unified interpretation of appendix I to the BWM Convention (Form of International Ballast Water Management Certificate), as set out in annex 4, and instructed the Secretariat to circulate it by means of BWM.2/Circ.66/Rev.3, consolidating all existing unified interpretations to the BWM Convention.

Guidelines for re-evaluations if modifications are made to a BWMS

4.37 The Committee approved the guidelines for re-evaluations in cases where modifications have been made to a ballast water management system, as set out in annex 4 to document MEPC 78/4/2, and instructed the Secretariat to issue the revised *Methodology for information gathering and conduct of work of the GESAMP-Ballast Water Working Group*, incorporating the aforementioned guidelines as a new chapter 12, by means of BWM.2/Circ.13/Rev.5.

4.38 In this regard, the Committee noted that the revised Methodology incorporating these guidelines would be applicable to all cases where modifications were made after this session to an already approved ballast water management system.

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Procedures for re-evaluations of BWMS if the recommendation of the GESAMP-BWWG may be challenged

4.39 The Committee endorsed the Group's view that for re-evaluations of ballast water management systems which made use of Active Substances to be conducted in cases where the recommendation of the GESAMP-BWWG might be challenged in the Committee:

- .1 the Administration requesting a re-evaluation should provide sound scientific justification and clear rationale for the Committee's consideration;
- .2 the re-evaluation should not require substantial new information (in such a case a new application would instead need to be submitted); and
- .3 an additional fee of US\$20,000 would be payable if the recommendation of the GESAMP-BWWG did not change as a result of the re-evaluation and was subsequently endorsed by the Committee.

Temporary storage of treated sewage and grey water in ballast tanks

4.40 The Committee endorsed the Group's view that the relevant scope and objective for the consideration of the temporary storage of treated sewage and grey water in ballast tanks under this agenda item should be to ensure that ballast water discharges from ballast tanks used also for other purposes would be compliant with the BWM Convention, while other issues associated with this matter should be addressed in the context of MARPOL.

4.41 In addition, the Committee invited interested Member States and international organizations to submit concrete proposals on additional aspects for guidance on the temporary storage of treated sewage and grey water in ballast tanks under the BWM Convention, taking into account the principles set out in paragraphs 11 and 12 of document MEPC 78/4 and the points set out in paragraph 27 of the Group's report (MEPC 78/WP.8).

4.42 In this connection, the observer from IACS, supported by some delegations, recalled that it had sought specific confirmation from the Committee of the permission for the temporary storage of grey water and treated sewage, and expressed the opinion that, before starting work on guidance, there should be a decision on the aforementioned confirmation, which was still sought. Noting that clear confirmation on whether this practice was permitted or not would require lengthy discussion in plenary, the Committee deferred paragraph 14 of document MEPC 78/4 to MEPC 79 for that session to decide on the sought confirmation in conjunction with its consideration of any further submissions.

4.43 Moreover, the Committee noted the need to consider what further action might be needed with respect to MARPOL in connection with the temporary storage of treated sewage and grey water in ballast tanks.

Form of Ballast Water Record Book

4.44 The Committee invited interested Member States and international organizations to submit concrete proposals for amendments to appendix II to the BWM Convention (Form of Ballast Water Record Book) to MEPC 79 with a view to approval at that session, using document MEPC 78/4/4 as the basis and taking into account the relevant comments and information in documents MEPC 77/4/9 and MEPC 76/4/2, as well as the relevant discussions at this session.

Exemptions under the Same Risk Area concept

4.45 The Committee instructed the Secretariat to resolve the problems with regard to registering exemptions based on a Same Risk Area (SRA) in the BWM Module in GISIS, as this hindered Member States from fulfilling their mandatory obligations under the BWM Convention.

Example ballast water reporting form

4.46 The Committee noted that, owing to time constraints, the Group was not able to consider document MEPC 78/4/7 concerning amendments to the appendix of the 2017 Guidelines (G6) (Example ballast water reporting form).

Future work

4.47 The Committee noted the request of the Group on re-establishment of the Review Group at MEPC 79, in accordance with the provisions of regulation D-5 of the BWM Convention, to consider also those terms of reference that could not be considered or concluded at this session due to time constraints.

5 AIR POLLUTION PREVENTION

Matters considered by correspondence prior to the virtual meeting

5.1 In accordance with the arrangements of the remote session, as outlined in document MEPC 78/1/1 (paragraphs 12 to 15) and its annex 3 (section 2 on agenda item 5), as updated by paragraph 7 of document MEPC 78/1/1/Add.1 (Chair), the Committee considered by correspondence, prior to the virtual meeting, the following documents:

- .1 MEPC 78/5/1 (China), proposing draft amendments to the 2019 Guidelines for onboard sampling for the verification of the sulphur content of the fuel oil used on board ships (MEPC.1/Circ.864/Rev.1);
- .2 MEPC 78/9/1 (paragraphs 2.13, 2.22, 2.23, 2.24 and 2.29) (Secretariat), providing the list of actions requested of the Committee on matters emanating from PPR 9 related to air pollution prevention and in particular those actions that were not to be considered during the virtual meeting;
- .3 MEPC 78/INF.4 (Secretariat), summarizing relevant information reported to IMO related to the implementation of the global 0.50% sulphur limit (IMO2020) and presenting the results of the sulphur monitoring programme for 2021; and
- .4 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 NO_x and Black Carbon emissions, which indicated that use of Fatty Acid Methyl Ester (FAME) blended in conventional VLSFO did not increase the engine NO_x and Black Carbon emissions compared to conventional fossil fuels.

5.2 During the virtual meeting, the Committee reconfirmed the endorsement of the Chair's proposals in annex 3 to document MEPC 78/1/1, as set out in the following paragraphs 5.3 to 5.8.

Global 0.50% sulphur limit

5.3 The Committee instructed PPR 10 to consider document MEPC 78/5/1, under agenda item 16 (Any other business), and to advise the Committee accordingly.

5.4 The Committee noted the information regarding the implementation of the global 0.50% sulphur limit (IMO2020) and the results of the sulphur monitoring for 2021 provided in document MEPC 78/INF.4.

Matters arising from PPR 9

5.5 With regard to document MEPC 77/11/1 (Finland, United States and IACS), which had been referred by MEPC 77 to PPR 9, the Committee noted that the proposal to extend the scope of output 2.15 (Development of amendments to MARPOL Annex VI and the NO_x Technical Code on the use of multiple engine operational profiles for a marine diesel engine) to cover engine test-cycles would be further considered by a correspondence group established by PPR 9 in conjunction with all other documents relating to output 2.15 that the Sub-Committee had for its consideration.

5.6 The Committee approved the revised unified interpretation of paragraph 4.4.6.1 of the NO_x Technical Code 2008, set out in annex 5, for inclusion in a revision of MEPC.1/Circ.895 (i.e. MEPC.1/Circ.895/Rev.1), and instructed the Secretariat to issue the revised circular.

5.7 The Committee also approved the unified interpretation of regulation 18.3 of MARPOL Annex VI, with regard to the use of biofuels, set out in annex 6, for inclusion in a further revision of MEPC.1/Circ.795 (i.e. MEPC.1/Circ.795/Rev.6), and instructed the Secretariat to issue the revised circular. In this context, the Committee noted that the remaining two requests in paragraphs 12 and 16 of document MEPC 77/7/7 (IACS), pertaining to the revision of MARPOL Annex VI and the NO_x Technical Code, needed further consideration and agreed to do so in conjunction with other documents concerning biofuels (see paragraphs 5.19 to 5.22 below).

5.8 With regard to documents MEPC 77/11/2 (Marshall Islands et al.) and MEPC 77/INF.6 (EUROMOT), which had also been referred by MEPC 77 to PPR 9, the Committee:

- .1 noted that, while there was support, in general, at PPR 9 for a new output on revision of the 2017 Guidelines addressing additional aspects of the NO_x Technical Code 2008 with regard to particular requirements related to marine diesel engines fitted with Selective Catalytic Reduction (SCR) systems (resolution MEPC.291(71) as amended by resolution MEPC.313(74)) (the 2017 SCR Guidelines), the proposal in document MEPC 77/11/2 could not be supported by the Sub-Committee; and
- .2 invited Member States and international organizations to submit proposals for a new output on the revision of the 2017 SCR Guidelines to a future session of the Committee, taking into account document MEPC 77/INF.6 and the view that the output proposed in document MEPC 77/11/2 could be subject to further improvement, in particular as to the scope of the revision of the 2017 SCR Guidelines.

Matters considered during the virtual meeting

Exhaust gas cleaning systems (EGCS) matters arising from PPR 9

5.9 The Committee had for its consideration two draft MEPC circulars concerning exhaust gas cleaning systems (EGCS), as prepared by PPR 9, namely the following:

- .1 the draft MEPC circular on the 2022 guidelines for risk and impact assessments of the discharge water from exhaust gas cleaning systems, as set out in annex 6 to document PPR 9/21/Add.1; and
- .2 the draft MEPC circular on the 2022 guidance regarding the delivery of EGCS residues and stored discharge water to port reception facilities, as set out in annex 7 to document PPR 9/21/Add.1.

5.10 In this connection, the Committee also had for its consideration the following two documents:

- .1 MEPC 78/9/3 (Germany), containing unified and representative emission factors for environmental risk assessment of the discharge water from EGCS and proposing that they be included as a new appendix 3 to the draft 2022 guidelines for risk and impact assessments of the discharge water from exhaust gas cleaning systems; and
- .2 MEPC 78/9/4 (CLIA), commenting on relevant action requested by PPR 9, as reported in document MEPC 78/9/1, and the proposed draft 2022 guidelines for risk and impact assessments of the discharge water from exhaust gas cleaning systems; and suggesting that the Committee invite GESAMP to provide a technical opinion on the matters identified by CLIA or to refer them to a working group.

5.11 In the subsequent discussion, some delegations expressed the view that because of the significant time constraints faced by PPR 9, not all key issues captured within the draft 2022 guidelines for risk and impact assessments of the discharge water from exhaust gas cleaning systems had been sufficiently debated, and, therefore, in order to ensure that the draft guidelines were scientifically sound and fit for purpose, it was reasonable to:

- .1 refer them back to the PPR Sub-Committee for further review in conjunction with the proposals in document MEPC 78/9/3 and the areas of concern described in paragraphs 4 to 6 of document MEPC 78/9/4; or
- .2 defer their approval to MEPC 79 so that a working group could further review them; and
- .3 request GESAMP (GESAMP EGCS Task Team) to consider the areas of concern described in paragraphs 4 to 6 of document MEPC 78/9/4, and advise MEPC or the PPR Sub-Committee, as appropriate.

5.12 In this connection, the observer from CLIA proposed that without further expert review, at minimum, the WET testing method should be given equal footing as the alternative summation method.

5.13 The observer from CESA proposed that the Committee request the Legal Affairs Office of the Organization or the Legal Committee to review the draft guidelines, particularly paragraphs 4.1 and 7.4, with a view to better defining the types of water bodies to be assessed, while avoiding geographical terms that could be misinterpreted and potentially and inadvertently result in an expansion of the geographical scope beyond territorial water.

5.14 Most delegations that commented on the proposal in document MEPC 78/9/3 to include emission factors expressed the view that:

- .1 the use of common emission factors was important for consistent application of the risk assessment guidelines; but
- .2 time had been insufficient for the emissions factors contained in document MEPC 78/9/4 to be validated against additional data and other emission factors, such as those contained in documents PPR 9/INF.21 (Canada) and PPR 7/INF.23 (Secretariat), which should be considered so as to ensure that any common emissions factors to be agreed were as representative as possible; and
- .3 GESAMP could be invited to review the emission factors for environmental risk assessment listed in the annex to document MEPC 78/9/3 and other sources, with a view to advising the Committee on this matter.

5.15 Notwithstanding the above-mentioned views and comments, there was widespread support for the draft 2022 guidelines for risk and impact assessments of the discharge water from exhaust gas cleaning systems, as prepared by PPR 9, to be approved at this session, with the understanding that they would be kept under review.

5.16 Consequently, the Committee 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.

5.17 Concerning the draft 2022 guidance regarding the delivery of EGCS residues and stored discharge water to port reception facilities, set out in annex 8 to the report of PPR 9 (PPR 9/21/Add.1), the Committee agreed to delete the words "and stored discharge water" from the title to avoid any possibility of stored discharge water being considered as an EGCS residue. Subsequently, the Committee approved MEPC.1/Circ.900 on *2022 Guidance regarding the delivery of EGCS residues to port reception facilities*.

5.18 For the remaining work with the scope of output 1.23, some delegations expressed the view that the PPR Sub-Committee should continue to work on regulatory matters, the establishment of a database of substances in EGCS discharge water, and the compilation of representative common emission factors (also see paragraph 14.14).

Matters relating to biofuels and biofuel blends

5.19 The Committee noted that documents MEPC 78/5 (India), MEPC 78/7/28 (Canada), MEPC 78/INF.10 (France), MEPC 77/7/7 (IACS) (paragraphs 12 and 16), MEPC 76/7/22 (Denmark et al.) and MEPC 76/7/32 (India) had been submitted and related to the use of biofuels and biofuel blends as fuel oil by ships.

5.20 On this issue, some delegations highlighted that biofuels and biofuel blends were promising alternative fuels for shipping, available in the short-term for use in the existing fleet without engine modification. These delegations, in referring in particular to document

MEPC 78/5 (India), supported expediting the development of interim guidelines for the usage of biofuel from crops and waste biomass. The statement made by the delegation of Brazil, supported by Argentina and the United Arab Emirates, is set out in annex 28.

5.21 Some delegations, in reiterating their support for the unified interpretation of regulation 18.3 of MARPOL Annex VI with regard to the use of biofuels adopted at this session (see paragraph 5.7) which would, in their view, appropriately address the issue of NO_x emissions from biofuels and biofuel blends used in marine diesel engines, highlighted that the information and proposals relating to GHG emissions resulting from the use of biofuels (e.g. life cycle assessment, CO_2 emissions and carbon factor assessment) would still need consideration in ISWG-GHG and/or the Committee. In this context, the delegation of Germany, supported by others, expressed the view that carbon factors for biofuels and biofuel blends should be dealt with in the IMO Data Collection System and the LCA guidelines rather than through design requirements, e.g. in the EEDI calculation guidelines.

5.22 Due to time constraints, the Committee did not consider this matter further and agreed to defer consideration of documents MEPC 78/5, MEPC 78/7/28, MEPC 78/INF.10, MEPC 77/7/7 (paragraphs 12 and 16), MEPC 76/7/22 and MEPC 76/7/32 to MEPC 79.

Reporting of flashpoint under MARPOL Annex VI

5.23 With regard to the proposed amendment to appendix V of MARPOL Annex VI to include flashpoint as mandatory information in the bunker delivery note, as prepared by the Correspondence Group on Data Collection and Analysis under regulation 18 of MARPOL Annex VI (MEPC 75/5/1, paragraph 54 and annex), which the Committee had considered at its previous session, the Committee recalled that it had:

- .1 noted that the Working Group on Air Pollution and Energy Efficiency established during MEPC 77 had agreed that, while the preparation of draft amendments to appendix V of MARPOL Annex VI to include flashpoint was a simple exercise, it was preferable to await the outcome of the work being carried out by MSC on development of further measures to enhance the safety of ships relating to the use of fuel oil (MEPC 77/16, paragraph 5.20);
- .2 noted the Working Group's view that once MSC had determined and agreed on the flashpoint data that ought to be recorded and reported in relation to safety, then corresponding draft amendments to appendix V of MARPOL Annex VI could be prepared by the Committee (MEPC 77/16, paragraph 5.20); and
- .3 agreed to invite MSC 105 to note the status of the work undertaken at MEPC in relation to flashpoint of fuel oil (MEPC 77/16, paragraph 5.22).
- 5.24 With regard to the relevant outcome of MSC 105, the Committee noted:
 - .1 the draft SOLAS amendments with regard to flashpoint, as approved by MSC 105 and set out in annex 27 to document MSC 105/20/Add.1; and
 - .2 the revised action plan for the development of measures to enhance the safety of ships relating to the use of oil fuel, as set out in annex 3 to document MSC 105/WP.10.

5.25 In light of the outcome of MSC 105 and considering the urgency of the matter, the Committee agreed that information on the flashpoint of fuel oil should be included in the bunker delivery note under MARPOL Annex VI.

5.26 Accordingly, the Committee approved draft amendments to appendix V of MARPOL Annex VI, as set out in annex 7, and requested the Secretary-General to circulate them in accordance with article 16(2) of MARPOL, with a view to adoption by MEPC 79.

Matters deferred to MEPC 79

5.27 The Committee recalled that it had deferred consideration of documents MEPC 78/5, MEPC 78/7/28, MEPC 78/INF.10, MEPC 77/7/7 (paragraphs 12 and 16), MEPC 76/7/22 and MEPC 76/7/32 to MEPC 79 (see paragraph 5.22).

6 ENERGY EFFICIENCY OF SHIPS

MATTERS CONSIDERED BY CORRESPONDENCE PRIOR TO THE VIRTUAL MEETING

6.1 In accordance with the arrangements of the remote session, as outlined in document MEPC 78/1/1 (paragraphs 12 to 15) and its annex 3 (section 3 on agenda item 6), the Committee considered by correspondence, prior to the virtual meeting, the following documents:

- .1 MEPC 78/6 (ITTC), providing updates to the ITTC recommended procedures and guidelines concerning the determination and verification of the EEDI requirements; and
- .2 MEPC 78/INF.3 (Secretariat), providing the eleventh summary of data and graphical representations of the information in the EEDI database.

6.2 During the virtual meeting, the Committee reconfirmed the Chair's proposals in annex 3 to document MEPC 78/1/1, and noted the information provided in these two documents.

MATTERS DEFERRED TO MEPC 79

6.3 As proposed in document MEPC 78/1/1 (annex 4), the Committee agreed to defer the consideration of documents MEPC 78/6/1 (India), MEPC 77/6/2 (Germany), MEPC 77/INF.29 (Germany), MEPC 76/6 (Japan), MEPC 76/6/3 (China), MEPC 76/6/5 (CESA), MEPC 76/6/9 (IACS), MEPC 76/INF.27 (Japan), MEPC 75/6/4 (INTERTANKO), MEPC 74/5 (IACS) and MEPC 74/5/6 (ICS, ITF and ASEF) to MEPC 79.

7 REDUCTION OF GHG EMISSIONS FROM SHIPS

MATTERS CONSIDERED BY CORRESPONDENCE PRIOR TO THE VIRTUAL MEETING

7.1 In accordance with the arrangements of the remote session, as outlined in document MEPC 78/1/1 (paragraphs 12 to 15) and its annex 3 (section 4 on agenda item 7), as updated by paragraph 7 of document MEPC 78/1/1/Add.1 (Chair), the Committee considered by correspondence, prior to the virtual meeting, the following documents:

.1 MEPC 78/7/1(Finland), providing information on Finland's National Action Plan (NAP) to address GHG emissions from ships;

- .2 MEPC 78/7/13 (Republic of Korea), commenting on the outcomes of ISWG-GHG 11 concerning the development of the draft GHG life cycle assessment (LCA) guidelines, in particular the measurement of actual methane slip in terms of tank-to-wake emission factors by using the relevant procedures in the NO_x Technical Code 2008;
- .3 MEPC 78/INF.5 (Secretariat), reporting the outcome of the United Nations Climate Change Conference (COP 26) held in Glasgow, United Kingdom, in November 2021;
- .4 MEPC 78/INF.12 (Secretariat), providing information on a new guide entitled National Action Plan to Address GHG Emissions from Ships;
- .5 MEPC 78/INF.16 (IACS), providing information on the 2022 IACS Guidelines for the use of Computational Fluid Dynamics (CFD) for the purposes of deriving the reference speed (Vref) in the framework of EEXI regulation;
- .6 MEPC 78/INF.23 (Republic of Korea), providing information on the establishment of a land-based test-bed for eco-friendly ship fuel and propulsion system considering the ocean environment;
- .7 MEPC 78/INF.24 (Republic of Korea), providing information on a marine testbed ship for alternative fuels and electric propulsion systems;
- .8 MEPC 78/INF.27 (IACS), setting out IACS' understanding and recommendations contained in the new draft 2022 IACS guidelines on the implementation of EEXI.

7.2 During the virtual meeting, the Committee reconfirmed the endorsement of the Chair's proposals in annex 3 to document MEPC 78/1/1 as further updated in document MEPC 78/1/1/Add.1, as set out in the following paragraphs 7.3 to 7.9.

National Action Plans to address GHG emissions

7.3 The Committee noted the information provided in document MEPC 78/7/1 regarding Finland's National Action Plan (NAP) to address GHG emissions from ships and invited other Member States to submit their NAPs to the Secretariat to be uploaded on the dedicated space for Member States' NAPs on the IMO website, https://www.imo.org/en/ourwork/environment/pages/relevant-national-action-plans-and-strategies.aspx.

7.4 The Committee also noted the information provided in document MEPC 78/INF.12 (Secretariat) on a new guide entitled National Action Plan to Address GHG Emissions from Ships: From Decision to Implementation, developed by the IMO-Norway GreenVoyage2050 Project aiming at supporting policy makers wishing to develop an NAP, and invited interested Member States to use IMO's technical assistance initiatives to support developing countries with the development of an NAP in accordance with resolution MEPC.327(75) on *Encouragement of Member States to develop and submit voluntary National Action Plans to address GHG emissions from ships* and to consider making a financial contribution to the GHG TC Trust-Fund to support the Organization's efforts in this regard.

Measurement of methane slip emissions from LNG dual fuel engines

7.5 The Committee noted the information provided in document MEPC 78/7/13 (Republic of Korea) on the measurement of actual methane slip emissions from LNG dual fuel engines in terms of tank-to-wake (TtW) emission factors by using the relevant procedures specified in the NO_x Technical Code 2008, and instructed the Correspondence Group on Marine Fuel Life Cycle GHG Analysis established at this session to further consider the matter.

United Nations Climate Change Conference

7.6 The Committee noted the information provided in document MEPC 78/INF.5 (Secretariat) on the outcome of the United Nations Climate Change Conference held in Glasgow, United Kingdom, in November 2021 (COP 26) and 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.

EEXI

7.7 The Committee noted the information provided in document MEPC 78/INF.16 (IACS) on the development of the 2022 IACS guidelines for the use of computational fluid dynamics (CFD) for the purposes of deriving the reference speed (Vref) in the framework of EEXI regulation, which would be incorporated in an IACS Recommendation.

7.8 The Committee also noted the information provided in document MEPC 78/INF.27, setting out IACS' understanding and recommendations contained in the new draft 2022 IACS guidelines on the implementation of EEXI (annexed to that document), which, at the time of writing that document, was in the final stages of development and will be incorporated in an IACS Recommendation.

Testbeds for alternative fuels and propulsion systems

7.9 The Committee noted the information provided in documents MEPC 78/INF.23 and MEPC 78/INF.24 (Republic of Korea) on the development of a land-based testbed for eco-friendly ship fuel and propulsion systems considering the ocean environment, and on a marine testbed ship for alternative fuels and electric propulsion systems, respectively.

MATTERS CONSIDERED DURING THE VIRTUAL MEETING

- 7.10 The Committee agreed to consider matters under this agenda item in the following order:
 - .1 proposals related to revision of the Initial IMO GHG Strategy;
 - .2 outcome of ISWG-GHG 12 in conjunction with proposals for mid-term GHG reduction measures and the establishment of the IMRB submitted to this session;
 - .3 outcome of ISWG GHG 11; and
 - .4 proposals related to onboard CO₂ capture.

7.11 The Committee noted that documents MEPC 78/7/28, MEPC 76/7/22 and MEPC 76/7/32, concerning the use of biofuels and biofuel blends as fuel oil by ships, had been considered under agenda item 5 (Air pollution prevention) (see paragraphs 5.19 to 5.22).

Proposals related to the revision of the Initial IMO GHG Strategy

7.12 The Committee had for its consideration the following documents containing proposals related to the revision of the Initial IMO GHG Strategy:

- .1 MEPC 78/7 (WSC), suggesting six strategic elements critical to address in the further development of IMO's GHG strategy and specific regulatory initiatives, market-based measures (MBMs) and related programmes that would be necessary to successfully navigate a major energy transition in the commercial maritime sector;
- .2 MEPC 78/7/2 (ICS), suggesting specific text to be considered in the revision of the Initial IMO GHG Strategy, especially in relation to a level of ambition of net zero emissions by 2050; also emphasizing the need for MBMs in expediting the take-up of zero-carbon fuels, and the importance of the GHG TC-Trust Fund to support implementation of the Revised Strategy in developing countries, in particular LDCs and SIDS;
- .3 MEPC 78/7/4 (India), highlighting aspects which may be taken into account during revision of the Initial IMO GHG Strategy including the need for, inter alia, clarity on the levels of ambition, sector-wise targets and differentiated responsibilities;
- .4 MEPC 78/7/6 (CSC), providing a summary of a study concerning the dual legal obligations imposed by the Paris Agreement and the UN Convention on the Law of the Sea and the related responsibilities for Member States to reduce emissions from international shipping via national and regional regulation, in line with the Paris Agreement temperature goals;
- .5 MEPC 78/7/14 (Australia et al.), proposing that the Committee establish a dedicated session of ISWG-GHG between MEPC 78 and MEPC 79 to develop a Revised Strategy and containing for consideration draft terms of reference for the proposed ISWG-GHG and a draft table of contents for the Revised Strategy;
- .6 MEPC 78/7/18 (WWF et al.), drawing attention to the publication by the Intergovernmental Panel on Climate Change (IPCC) of the second part of three working group reports published as part of the Sixth Assessment Cycle, in particular the Working Group II report focusing on the physical science basis of climate change;
- .7 MEPC 78/7/20 (Austria et al.), commenting on and supporting the views and proposals set out in MEPC 78/7/14 (Australia et al.) and in particular the proposal for a revision of the levels of ambition taking into account the latest climate science and, in this regard, the inclusion of a specific date of no later than 2050 to phase out GHG emissions from international shipping; and the revision of other parts of the Initial IMO Strategy, such as the possible introduction of an additional progress checkpoint in 2040 and the updating of the list of candidate mid- and long-term measures;
- .8 MEPC 78/7/24 (United States), providing comments and supporting in general the proposals set out in document MEPC 78/7/14 (Australia et al.) suggesting the convening of a dedicated ISWG-GHG meeting between MEPC 78 and MEPC 79; supporting the framing of 2050 as the phase-out

date of GHG emissions from international shipping; and emphasizing the importance of strengthening the levels of ambition for 2030 and adding an intermediary target for 2040, in order to steer the sector on a 1.5°C-aligned pathway to zero emissions;

- .9 MEPC 78/7/26 (Angola et al.), providing comments on document MEPC 78/7/14 (Australia et al.) and containing proposals with the aim of facilitating the revision of the Initial IMO GHG Strategy, including suggestions related to the comprehensiveness of the review, the inclusion of feasibility analysis and impact assessments and the need for mitigation mechanisms for negative impacts; paying due attention to common but differentiated responsibilities; and questioning the necessity of having an ISWG-GHG session dedicated to the revision of the Strategy;
- .10 MEPC 78/7/27 (WWF et al.), commenting on document MEPC 78/7/18 (WWF et al.) and drawing attention to the publication by IPCC on Mitigation of Climate Change, the third report of the Sixth Assessment Cycle (AR6), and to the accompanying words of the UN Secretary-General, which added further impetus to the recommendations contained in document MEPC 78/7/18;
- .11 MEPC 78/INF.7 (Japan), presenting a report that included the latest information on the diffusion of zero-emission fuels, technology development trends and issues for the realization of zero-emission ships, GHG emission reduction simulations based on various scenarios, and regulatory developments that were considered necessary to achieve net zero emissions by 2050;
- .12 MEPC 78/INF.13 (CSC), presenting a study on the dual legal obligations imposed by the Paris Agreement and the UN Law of the Sea, and outlining the responsibilities of Member States to reduce emissions from international shipping via national and regional regulation, in line with the Paris Agreement temperature goals; and
- .13 MEPC 78/INF.14 (Denmark et al.), presenting a gap analysis on the innovation needs for the decarbonization of shipping; investigating the innovations needed through the entire value chain to decarbonize shipping; and describing how, in total, 275 innovation and commercialization proposals were provided via a Delphi process involving an international panel of experts.

7.13 The Committee recalled that the *Initial IMO Strategy on Reduction of GHG Emissions from Ships* foresaw the adoption of a Revised Strategy in spring 2023 and to that purpose MEPC 77, in view of the urgency for all sectors to accelerate their efforts to reduce GHG emissions as emphasized in the recent IPCC² reports and the Glasgow Climate Pact, had recognized the need to strengthen the ambition of the Initial Strategy during its revision process, and had agreed to initiate the revision of the Initial Strategy with a final draft Revised Strategy to be considered by MEPC 80, with a view to adoption.

7.14 The Committee recalled also that MEPC 77 had agreed on the following terms of reference for the revision of the Initial Strategy: "Taking into account the progress made by the Organization since the adoption of the Initial GHG Strategy, the 'key stages' for the adoption of a Revised IMO GHG Strategy, as set out in section 6.2 of the Initial GHG Strategy, relevant data, and in accordance with the timeline described in the Programme of follow-up actions of

² Reference is made to the contribution of Working Group I to the IPCC Sixth Assessment Report and the IPCC Special Report on Global Warming of 1.5°C.

the Initial IMO Strategy on Reduction of GHG Emissions from Ships up to 2023, conduct a revision of the Initial GHG Strategy".

7.15 The Committee further recalled that MEPC 77 had invited interested Member States and international organizations to work together and to submit concrete proposals for a Revised GHG Strategy to this session for consideration and agreed that sufficient time should be allocated to ensure the timely completion of the revision of the Initial Strategy.

Discussion on the proposals related to the revision of the Initial Strategy

7.16 Following a suggestion by the Chair, delegations were invited, in their consideration of proposals related to the revision of the Initial IMO GHG Strategy, to focus, in addition to any general comments on the revision of the Strategy, on the following elements:

- .1 the revision of the vision and levels of ambition;
- .2 how to ensure a fair and just transition; and
- .3 how to ensure that the revision of the Initial Strategy would be finalized before MEPC 80.

7.17 Many delegations, in recalling that the Initial Strategy had been a useful framework for the Organization so far to advance climate action and coordinate action among stakeholders, encouraged all delegations to work together and strive to adopt a Revised Strategy by consensus at MEPC 80.

Specific views on the revision of the vision and levels of ambition

7.18 A number of delegations, in referring in particular to documents MEPC 78/7/14 (Australia et al.), MEPC 78/7/20 (Austria et al.), MEPC 78/7/24 (United States), and to the conclusions of the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), and recalling the agreement of MEPC 77 to strengthen the level of ambition in the Revised Strategy, expressed the view that the Revised Strategy should explicitly state a vision and levels of ambition over a time frame consistent with the Paris Agreement's 1.5°C temperature goal, i.e. to peak GHG emissions as soon as possible and phase them out no later than 2050.

7.19 A number of delegations, in referring in particular to document MEPC 78/7/26 (Angola et al.), while recognizing that the revision of the levels of ambition in the Initial Strategy should be supported by specific feasibility analysis and impact assessment, were of the view that it would be inappropriate to set an ambition of zero-carbon shipping by 2050 without concrete and reliable data to support it and that such ambition would not be in line with the Paris Agreement nor the Glasgow Climate Pact. Several of these delegations stated that the level of ambition should be achievable, credible, pragmatic, be based on the observed and expected technology readiness levels (TRLs) of zero-carbon alternatives, avoid hampering global trade and should reflect solutions and a pathway to achieve the goals.

7.20 Several delegations stated that raising the levels of ambition should be informed by an assessment of the readiness and availability of fuels and port infrastructure, a feasibility study and an assessment of the impacts of higher ambition on States based on scientific evidence. These delegations stressed the importance for the credibility of the Organization of adopting realistic and achievable levels of ambition, and that this decision should be informed by up-to-date analysis taking into account, in particular, different national circumstances and capacities.

7.21 In this connection, several other delegations, highlighting that no such requirement had been agreed by the Committee nor was included in the Initial Strategy, could not support making the revision of the Strategy contingent on such studies. These delegations underlined that various relevant studies on fuel availability and technology readiness had already been submitted to the recent Committees sessions. Furthermore, these delegations welcomed appropriate additional research and provision of any new evidence that would also take into account the impact of new regulations setting clear requirements and level of ambition, to be made available before MEPC 80 without delaying the adoption of the Revised Strategy in accordance with the agreed timeline for the revision.

7.22 The Committee considered different proposals related to the formulation of the proposed levels of ambition. In this regard, while several delegations expressed the view that the Revised Strategy should include a specific date of no later than 2050 to phase out GHG emissions from international shipping, several other delegations referred to "net zero emissions by 2050".

7.23 In this regard, several delegations expressed the view that "net-zero" would allow for more flexibility to take full well-to-wake life cycle emissions into account and for the possible use of technologies such as biofuels, carbon capture or extraction of CO_2 from the atmosphere. Several other delegations rejected the possibility of using carbon offsets in shipping to achieve the sector's ambition.

7.24 Several delegations suggested that there was a need to clarify the meaning of terms such as "zero emissions", "zero-carbon", "net zero", "climate neutrality", while several other delegations highlighted that further discussion was needed not only on the terminology but also on the formulation of the targets.

7.25 Several delegations were of the view that clear and ambitious intermediate targets for 2030 and 2040 would be required to provide certainty to the sector and ensure alignment with the temperature goals consistent with the Paris Agreement. Several delegations also supported the introduction of intermediate "checkpoints" with appropriate tools to monitor progress. Some of these delegations proposed to set progress checkpoints every five years, with some other delegations suggesting starting in 2025.

7.26 Several delegations stated that the 2030 target should be 50% with full decarbonization by 2040. In this regard, one delegation expressed caution about the adoption of any additional intermediate targets as this could potentially encourage short-term limited solutions to achieve such targets, e.g. biofuels alone or LNG, and divert needed investments in zero-carbon technologies and fuels, such as hydrogen, methanol and ammonia.

7.27 Several delegations were not in a position at this stage to support any intermediate targets and expressed the view that the Revised Strategy should also take into account that the short-term measure would be reviewed by 2026 before setting such targets.

7.28 Several delegations, in referring in particular to document MEPC 78/7/2 (ICS), stated that the levels of ambition of the Revised Strategy should be set in terms of actual performance to be achieved and not in terms of aspirational "efforts to be pursued". Several delegations expressed their preference for setting overall global (across-the-board) objectives rather than sectoral ones, in order to ensure a global level playing field.

7.29 Several delegations, in referring to document MEPC 78/7/4 (India), expressed the view that the Revised Strategy may set sector-wise targets with some ship types made to reach net-zero earlier than other ship types focusing efforts on the most polluting ship types and sizes.

7.30 Several delegations could support, in principle, new ways of formulating targets, e.g. reducing GHG emissions intensity or to aim at having a percentage of the fleet that would be zero-GHG emission by a given year. Several other delegations expressed the view that these formulations could only play a supportive role.

7.31 Several delegations stressed the need for the Revised Strategy to not only cover CO_2 but also other GHG emissions, including emissions of methane (CH₄) and nitrous oxide (N₂O), and Black Carbon (BC), also stating that an increased use of alternative low-carbon fuels may have the potential to generate substantial non-CO₂ GHG emissions under certain circumstances.

7.32 Several other delegations highlighted that CO₂ remained the dominant source of shipping's emissions, and for that reason the main focus in the Revised Strategy should be on that greenhouse gas.

7.33 Several delegations also stated that the levels of ambition identified in the Revised Strategy should be expressed in terms of well-to-wake emissions, i.e. over the entire life cycle of the fuel, in order to avoid shifting emissions from sea to land where fuels were produced. One delegation expressed the view that the Revised Strategy should also cover emissions of Black Carbon, which represented a significant portion of shipping's climate impact.

7.34 One delegation, supported by others, considered it problematic to legitimate the alignment of international shipping goals to the temperature goals of the Paris Agreement, given that the maritime sector was responsible for less than 3% of global emissions while being essential for the transport of 90% of global trade. In this regard, another delegation questioned whether similar increases in levels of ambition had been adopted in other sectors.

Specific views on how to ensure a fair and just transition

7.35 Following the invitation by the Chair to provide specific views on how to ensure a fair and just transition in the Revised Strategy, many delegations referred to concepts such as an equitable, inclusive and proportionate transition; leaving no one behind; mutual support; common but differentiated responsibility and respective capabilities (CBDR-RC); the importance of carrying out impact assessments and addressing disproportionately negative impacts on States, in particular developing States, including SIDS and LDCs.

7.36 One delegation recalled that the Glasgow Climate Pact recognized that limiting global warming to 1.5°C required accelerated action in this critical decade, on the basis of the best available scientific knowledge and equity, reflecting CBDR-RC and in the context of sustainable development and efforts to eradicate poverty.

7.37 Many delegations also provided their view on what these concepts could mean in the context of reducing GHG emissions from international shipping, by referring to concrete financial and technical support that could be provided by the Organization in relation to access to and deployment of technology; port-infrastructure development; and other in-sector and out-of-sector climate mitigation and adaptation projects. Some delegations provided concrete suggestions on sections in the Initial Strategy that could be expanded to that purpose.

7.38 Several delegations, in referring to document MEPC 78/7/26 (Angola et al.), recalled the centrality of the principle of CBDR-RC in the global fight against climate change, as enshrined, in particular, in the UNFCCC, the Paris Agreement and the Glasgow Climate Pact. Those delegations stressed that the Organization, in addressing GHG emissions from international shipping, should be guided by the CBDR-RC principle and that the Revised Strategy should provide clarity on how to operationalize this principle in the IMO GHG work, in

particular, how to address negative impacts on States, in particular developing States, including SIDS and LDCs.

7.39 In this regard, several delegations expressed the view that IMO could not only refer to the levels of ambition set out in agreements under the UNFCCC, but would have to apply all of the elements included in those instruments, including finance, technology transfer and capacity-building for mitigation and adaptation, in the context of IMO's GHG reduction efforts.

7.40 Several delegations, in referring in particular to the global access to zero-carbon alternatives, to the production of zero-carbon marine fuels, to technology transfer and to port infrastructure development, stated that the Revised Strategy should recognize that developing countries should receive financial and technical support by the Organization, and that this support should be considered from the outset in developing candidate mid- and long-term measures. Several delegations emphasized that the Committee should consider how to redistribute revenues generated by a carbon pricing mechanism, and that this redistribution should pursue, as a priority, the objective of reducing the burden of climate change and climate action on the most vulnerable countries.

7.41 Several delegations, in recalling the difficulty of finding an agreement on the guiding principles when finalizing the Initial Strategy, highlighted that the existing guiding principles provided a carefully crafted balance reflecting the nature of international shipping and should remain unchanged.

7.42 In this regard, several delegations recalled the need for all ships to give full and complete effect, regardless of flag, to implementing mandatory GHG reduction measures, as recognized in the Initial Strategy, but that differentiation could be operationalized in terms of targeted financial support to developing countries, in particular SIDS and LDCs. Several delegations suggested that one way to ensure a fair and just transition could be to incorporate elements of flexibility in the design of future regulatory measures, to allow for some degree of differentiation per route, trade or region.

7.43 Several delegations could not support the establishment of such compensatory mechanism and an expanded role for the CBDR-RC principle in the Revised Strategy, and rather suggested that an equitable transition may require the recognition of different national circumstances and justify the inclusion of elements such as address disproportionately negative impacts on States; facilitate in-sector adoption of zero-carbon fuels and technologies, paying particular attention to the needs of SIDS and LDCs; and support climate change adaptation in the wider maritime sector.

7.44 One delegation recalled that, in accordance with article 13 of the Paris Agreement, the special circumstances of SIDS and LDCs should be recognized when developing the candidate mid- and long-term measures and that placing undue burden on these countries should be avoided. This delegation also considered that a transition would be "fair and just" if it observed genuine rights of States to have access to acceptable living and development conditions, including for SIDS to have continuous access to shipping service and affordable goods.

7.45 Several delegations expressed the view that transition should avoid exceptions and exemptions that could weaken the emissions reductions effectiveness of adopted measures and avoid compensation mechanism. Those delegations were of the view that a fair and just transition should focus on avoiding, mitigating and addressing the impacts assessed for the candidate measures and removing barriers to the participation of some countries in the transition.

7.46 With regard to the guiding principles, several delegations expressed the view that a number of new guiding principles (e.g. the "polluter pays" principle, "environmental integrity", "equitable transition", "evidence-based decision-making") could also be reflected in the Revised Strategy.

Integration of level of ambition and just transition

7.47 Several delegations, in referring in particular to document MEPC 78/7/2 (ICS) and to the agreement of MEPC 77 to strengthen the level of ambition in the Revised Strategy, expressed the view that the revision should be limited to a minimum number of issues, the most important one being the levels of ambition.

7.48 Several other delegations, in referring in particular to document MEPC 78/7/26 (Angola et al.), expressed the view that the revision process of the Initial Strategy should follow a comprehensive review addressing all elements in the Strategy rather than merely focusing on the vision and ambition levels.

7.49 Several delegations stressed throughout the discussion that a strengthened level of ambition and a just transition should go hand in hand in the Revised Strategy.

7.50 In this context, the delegation of Argentina, supported by several other delegations, in highlighting that all elements of the Initial Strategy were interconnected, expressed the view that the revision of the Strategy should be addressed as a package, comprising the review of the following elements:

- .1 vision and levels of ambition;
- .2 how to operationalize the guiding principles of the Initial Strategy;
- .3 assessment of impacts of candidate measures on States, using as a basis the procedure due to be revised following the lessons-learned exercise);
- .4 monitoring of measures and monitoring of impacts and review of measures as necessary;
- .5 mechanism to address impacts on States; and
- .6 adaptation/just transition measures (i.e. financing for fuel supply and port infrastructure, technology transfer, access to new fuels).
- 7.51 One delegation also mentioned that the Revised Strategy should:
 - .1 include achievable and evidence-based levels of ambition;
 - .2 reinforce its guiding principles and clarify their application to guide the development of mid- and long-term measures;
 - .3 clarify terminology issues, e.g. "carbon neutrality"; and
 - .4 take into account the principle of adaptability, since developing countries would need to adapt their infrastructures and would require gradual support to this end.

7.52 Several delegations stressed the importance for the Organization to adopt ambitious levels of ambition in the Revised Strategy and an ambitious basket of mid-term measures to show IMO's global leadership in addressing GHG emissions from ships.

7.53 In this regard, several delegations suggested updating the list of mid- and long-term measures contained in the Initial Strategy. Several delegations stressed the importance of action at all levels of governance in the Revised Strategy, also referring to document MEPC 78/7 (WSC), and that the development of green corridors or the production of zero-emission fuels, for example, could be envisaged to increase demand for such fuels which could accelerate the transition. Several other delegations stated that such initiatives should be coordinated and implemented at a national and/or regional level rather than globally. One delegation stated that the Revised Strategy should also identify when the Fifth IMO GHG Study should be initiated.

Comments and suggestions on how to ensure that the revision of the Initial Strategy is finalized before MEPC 80

7.54 Several delegations, in highlighting the magnitude of the work and referring in particular to document MEPC 78/7/14 (Australia et al.), supported the establishment of a dedicated session of ISWG-GHG well before MEPC 79 in autumn 2022 to begin the revision process. These delegations highlighted the importance of providing dedicated meeting capacity and of holding in-person negotiations to discuss the revision of the Strategy. Some delegations suggested that this additional session of ISWG-GHG should report progress to MEPC 79 on several elements of the Revised Strategy. One delegation stated that due regard should be given to the inclusivity of the debate.

7.55 Several other delegations, in referring in particular to document MEPC 78/7/26 (Angola et al.), expressed the view that the Committee was already bearing a heavy workload on GHG-related issues and that there was a lack of evidence to make substantial revisions to the Initial Strategy at this stage. These delegations, also referring to the lack of translation of documents and interpretation in ISWG-GHG meetings, and the difficulty for small delegations, in particular from developing countries, to attend many meetings, stated that it was premature and not convenient in their view to convene a dedicated ISWG-GHG meeting focusing solely on the revision of the Initial Strategy before MEPC 79, but that this issue should be kept on the agenda of the Committee for the moment. One delegation suggested that the Committee should invite Member States and international organizations to submit concrete, specific and constructive proposals to MEPC 79, and acknowledge the need to hold at least two ISWG-GHG sessions to discuss the revision of the Initial Strategy between MEPC 79 and MEPC 80.

7.56 Several delegations expressed flexibility in supporting the consideration of the revision of the Strategy either in a dedicated ISWG-GHG session in autumn 2022 or in the format of a Working Group on Reduction of GHG Emissions from Ships during MEPC 79. These delegations stated that the planning of meetings should be flexible and maintain an overall balance between the need to have sufficient time for meeting preparation and the ensuing discussions, including drafting and submission of documents. Several of these delegations also suggested that informal workshops may help in enhancing the collective understanding of complex issues. Several delegations also highlighted that progress needed to be made in parallel on other important GHG-related issues, such as the development of mid- and long-term measures and the revision of the *Procedure for assessing impacts of candidate measures on States* (MEPC.1/Circ.885).

Way forward for the continuation of the revision of the Initial IMO GHG Strategy

7.57 Following the extensive and constructive discussion, during which more than 70 delegations of Member States and observer organizations took the floor on this issue, the Committee noted an intervention by the Secretary-General encouraging, in particular, the Committee to continue to excel in its spirit of cooperation and collaboration, while recognizing the needs of developing States, and keeping the levels of ambition in line with the international community.

7.58 The Secretary-General called on delegations to take concrete action at this session; and although time was short, it had never stopped this Organization from taking action in the past. He stressed that all delegations shared the same goal which was to work on upgrading the levels of ambitions towards 2050.

7.59 The Secretary-General congratulated the Committee with its good and tangible progress in developing candidate mid-term measures, including on carbon pricing, and the development of guidelines on life cycle GHG intensity of marine fuels. He also was encouraged by the continuously increasing number of R&D initiatives worldwide on low- and zero-carbon alternative fuels for shipping, including in developing countries. In his view, all these initiatives would boost our collective confidence in the revision of the Initial Strategy and our commitment to phase out GHG emissions from international shipping.

7.60 In concluding his remarks, the Secretary-General encouraged all delegates to continue their work by excelling in the Organization's spirit of cooperation and collaboration, recognizing the needs of developing States, and keeping the ambitions in line with the international community.

7.61 Following consideration, in concluding its consideration of this issue at this session, the Committee:

- .1 expressed its appreciation to all submitters of documents on the revision of the Initial Strategy to this session and recognized that all these documents contained valuable elements which would be further considered;
- .2 reiterated its commitment, as agreed at MEPC 77 and in view of the urgency for all sectors to accelerate their efforts to reduce GHG emissions, to strengthen the ambition of the Initial Strategy and to continue the revision process with a view to adopt the Revised Strategy by MEPC 80;
- .3 endeavoured, in that context, to continue its consideration of how to pursue efforts to phase out GHG emissions from international shipping and how to revise the Initial Strategy accordingly;
- .4 agreed to recommend to the Council to endorse the holding of one intersessional meeting before MEPC 79, i.e. ISWG-GHG 13, and to include the revision of the Initial Strategy in the terms of reference for ISWG-GHG 13; and to establish a working group on reduction of GHG emissions from ships during MEPC 79;
- .5 agreed to recommend to the Council to endorse the holding of two intersessional working group sessions between MEPC 79 and MEPC 80;

- .6 invited further submissions containing concrete proposals, including possible text proposals, as appropriate, addressing all relevant sections of the Initial Strategy, taking into account the comments expressed during this session;
- .7 requested the Secretariat to consider carrying out additional studies and organizing information session(s) and/or symposia, as appropriate, supporting the revision process; and
- .8 encouraged all delegations to work together intersessionnally on developing concrete proposals on the revision of the Strategy.

7.62 The statements delivered by the delegations of Argentina, the Bahamas, Belgium, Brazil, Canada, China, the Cook Islands, India, the Marshall Islands, Palau, Tuvalu, and the Bolivarian Republic of Venezuela, and the observer from INTERCARGO and the observer from the Inuit Circumpolar Council are set out in annex 28.

Outcome of ISWG-GHG 12 in conjunction with proposals for mid-term GHG reduction measures and the establishment of the IMRB submitted to this session

Outcome of ISWG-GHG 12

7.63 The Committee noted that the twelfth meeting of the Intersessional Working Group on Reduction of GHG Emissions from Ships (ISWG-GHG 12) had been held remotely from 16 to 20 May 2022, and that its report had been submitted to it as document MEPC 78/WP.6.

7.64 Having considered the report of ISWG-GHG 12 (MEPC 78/WP.6), and the additional information provided orally by the Chair of the Working Group, Mr. Sveinung Oftedal (Norway), the Committee approved it in general and took action, as described below.

Issues related to the short-term GHG reduction measure

7.65 The Committee recalled that the Correspondence Group on Carbon Intensity Reduction established by MEPC 76 had submitted its final report to this session in documents MEPC 78/7/7, MEPC 78/7/8, MEPC 78/7/9, MEPC 78/7/10, MEPC 78/7/11 and MEPC 78/7/12 (China et al.) accompanied by summaries of comments provided to the Correspondence Group, as set out in documents MEPC 78/INF.18, MEPC 78/INF.19, MEPC 78/INF.20, MEPC 78/INF.21 and MEPC 78/INF.22 (China et al.).

7.66 The Committee noted the following five documents submitted to this session commenting on the report of the Correspondence Group, which had already been considered by ISWG-GHG 12:

- .1 MEPC 78/7/15 (ICS and INTERTANKO), addressing the considerations of ships using cargo as a fuel and proposing additional text to the draft amendments to the 2016 Guidelines for the development of a Ship Energy Efficiency Management Plan (SEEMP);
- .2 MEPC 78/7/16 (ICS and INTERTANKO), suggesting amendments to the draft 2022 interim guidelines on correction factors and voyage adjustments for CII calculations (G5) to address the boil off gas management issue for LNG carriers prior to the entry into force of the GHG short-term measure;

- .3 MEPC 78/7/22 (India), presenting the results of a study undertaken to evaluate the effect of port infrastructure and efficiency affecting the ship operational efficiency and in turn the CII ratings; and identifying the need to enhance port efficiency and to incorporate correction factors for a more meaningful CII rating system to reflect ship efficiency correctly;
- .4 MEPC 78/7/23 (Panama et al.), commenting on document MEPC 78/7/11 and proposing that the Committee retain the text pertaining to the port time correction factor within the 2022 Interim guidelines on correction factors and voyage adjustments for CII calculations (G5); and
- .5 MEPC 78/7/25 (France et al.), discussing the calibration of the port time correction factor for cruise passenger ships AF_{PT} in the draft 2022 interim guidelines on correction factors and voyage adjustments for CII calculations (G5); and proposing, on the basis of the shortcomings observed, an amendment to this correction factor in order to provide a more balanced benefit for cruise passenger ships spending a significant time at berth while ensuring that the overall effectiveness of the CII framework was affected as little as possible.

7.67 The Committee noted the Group's discussion on the finalization of the draft guidelines supporting the implementation of the short-term GHG reduction measure.

SEEMP issues

- 7.68 Following consideration of SEEMP issues, the Committee adopted:
 - .1 resolution MEPC.346(78) on 2022 Guidelines for the development of a Ship Energy Efficiency Management Plan (SEEMP), as set out in annex 8; and
 - .2 resolution MEPC.347(78) on *Guidelines for the verification and company* audits by the Administration of part III of the Ship Energy Efficiency Management Plan (SEEMP), as set out in annex 9.

7.69 In this regard, the Committee noted the indicative SEEMP timeline set out in annex 2 of the 2022 Guidelines for the development of a Ship Energy Efficiency Management Plan (SEEMP) and invited all relevant stakeholders to initiate a review of SEEMPs without delay after adoption of the 2022 Guidelines to ensure the necessary updates of SEEMPs would be done before 31 December 2022.

DCS guidelines

7.70 Following consideration of issues related to guidelines on the IMO Ship Fuel Oil Consumption Database (DCS guidelines), the Committee adopted:

- .1 resolution MEPC.348(78) on 2022 Guidelines for Administration verification of ship fuel oil consumption data and operational carbon intensity, as set out in annex 10; and
- .2 resolution MEPC.349(78) on 2022 Guidelines for the development and management of the IMO Ship Fuel Oil Consumption Database, as set out in annex 11.

7.71 In this context, the Committee also approved MEPC.1/Circ.871/Rev.1 on *Guidance* for submission of data to the IMO data collection system of fuel oil consumption of ships from a State not Party to MARPOL Annex VI.

7.72 The Committee endorsed, in general, the suggestions and recommendations by the Secretariat, as set out in document ISWG-GHG 12/2 (Secretariat), on improving the annual reporting by the Secretariat and analysis of data submitted to the IMO Ship Fuel Oil Consumption Database.

Procedures for Port State Control

7.73 Following consideration of issues related to Procedures for Port State Control, the Committee agreed to refer the draft amendments to the *Procedures for Port State Control, 2021* (resolution A.1155(32)), as set out in the annex to document MEPC 78/7/10, to III 8 for further consideration, and instructed the III Sub-Committee to:

- .1 consider whether it should be regarded as a detainable deficiency if the implementation plan and/or the plan of corrective actions for a ship rated as D for three consecutive years or rated as E were not implemented by the ship as planned at the time of the inspection;
- .2 identify whether any further guidance needed to be developed on this issue; and
- .3 advise MEPC 79 accordingly.

EEXI issues

- 7.74 Following consideration of EEXI issues, the Committee adopted:
 - .1 resolution MEPC.350(78) on 2022 Guidelines on the method of calculation of the attained Energy Efficiency Existing Ship Index (EEXI), as set out in annex 12; and
 - .2 resolution MEPC.351(78) on 2022 Guidelines on survey and certification of the attained Energy Efficiency Existing Ship Index (EEXI), as set out in annex 13.

7.75 The Committee also approved MEPC.1/Circ.901 on *Guidance on methods, procedures and verification of in-service performance measurements.*

Correction factors and voyage adjustments for CII

7.76 In considering issues related to correction factors, voyage adjustments and reference lines for CII, some delegations expressed concerns about the non-inclusion of the several proposed correction factors and voyage adjustments, which in their view would undermine the robustness of the CII framework. One delegation, in recalling that the Initial Strategy referred to possible distortion of the market or trade, expressed support, in particular, for correction factors that addressed port waiting time. Another delegation stated with concern that not adopting the adverse weather correction factor would penalize countries such as the Pacific Islands which already faced more severe weather conditions due to climate change.

7.77 The observer of CLIA stated that the non-inclusion of the proposed port time correction factor for cruise passenger ships would create perverse incentives and lead to negative impacts, and that an expert group had already started to work on developing an alternative CII metric for cruise passenger ships with a view to providing concrete recommendations to a future session of the Committee. The observer also invited interested Member States and other international organizations to collaborate with it on developing an alternative CII metric for cruise passenger ships.

7.78 The observer of ICS, supported by other delegations, stated that the draft 2022 interim guidelines on correction factors and voyage adjustments for CII calculations (CII Guidelines, G5) considered by the Committee for adoption at this session were inconsistent with a timely implementation of the CII regulations and welcomed any early opportunity to reconsider correction factors before the review of the short-term measure due to be conducted by 1 January 2026.

- 7.79 Following consideration, the Committee adopted:
 - .1 resolution MEPC.352(78) on 2022 Guidelines on operational carbon intensity indicators and the calculation methods (CII Guidelines, G1), as set out in annex 14;
 - .2 resolution MEPC.353(78) on 2022 Guidelines on the reference lines for use with operational carbon intensity indicators (CII Reference Lines Guidelines, G2), as set out in annex 15;
 - .3 resolution MEPC.354(78) on 2022 Guidelines on the operational carbon intensity rating of ships (CII Rating Guidelines, G4), as set out in annex 16; and
 - .4 resolution MEPC.355(78) on 2022 Interim guidelines on correction factors and voyage adjustments for CII calculations (CII Guidelines, G5), as set out in annex 17.

7.80 With regard to the 2022 Guidelines on the reference lines for use with operational carbon intensity indicators (CII reference lines guidelines, G2), the Secretariat informed the Committee that following recalculations using the information contained in the IMO ship fuel oil consumption database, the value for high-speed craft designed according to SOLAS chapter X set out in table 1 of the Guidelines had been adjusted to restore as close as possible the intended distribution of ships, i.e. covering A to E ratings, around the median attained operational carbon intensity performance of this group of ships.

7.81 Following discussion, the Committee 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 guidelines to be completed at the latest by 1 January 2026. The Committee also invited Member States and international organizations, as well as the Secretariat, to submit proposals on how the review of the short-term measure could be conducted in an effective and efficient way.

7.82 The statements made by the observers from CLIA (supported by CESA), ICS and INTERTANKO are set out in annex 28.

Consideration of proposals for mid-term GHG reduction measures and the establishment of the IMRB

7.83 The Committee noted the discussions of ISWG-GHG 12 on the consideration of concrete proposals for mid-term measures and associated impact assessments in the context of phase I of the Work Plan as well as the proposal to establish an International Maritime Research Board (IMRB).

7.84 In addition, the Committee noted the following relevant documents submitted to this session:

- .1 MEPC 78/7/3 (Liberia et al.), suggesting some adjustments to the proposal to establish the IMRB and IMRF, as set out in document MEPC 76/7/7 (Denmark et al.), inter alia, to reflect the concerns of developing countries by making significant funds available (potentially some \$50 million annually) to the GHG TC-Trust Fund; and further suggesting that these adjustments would also increase opportunities for companies and research institutes in any Member State to participate in the applied R&D programmes which the IMRB would commission and to benefit from the knowledge and insights which would be generated by these programmes in support of their own GHG reduction efforts;
- .2 MEPC 78/7/5 (Japan), proposing to introduce a Zero-Emission Vessels (ZEVs) Incentive Scheme to provide incentives for stakeholders in the maritime and energy sectors to promote the necessary investment to enable effective deployment of zero-emission fuels and the necessary support for States, in particular SIDS and LDCs, to make an equitable transition to the use of zero-emission fuels to reduce GHG emissions from international shipping; and
- .3 MEPC 78/7/21 (Marshall Islands et al.), commenting on the proposal to expedite approval of an International Maritime Research and Development Board set out in document MEPC 78/7/3 (Liberia et al.), from the perspective of Pacific small island developing States (SIDS).

7.85 In the ensuing discussion, the observer from ICS underlined the importance of approving the draft amendments to MARPOL Annex VI on the establishment of the IMRB/F at this session to ensure early climate action and the generation of funds that could also financially support developing States, in particular SIDS and LDCs, with port-infrastructure projects and other possible climate mitigation and adaptation initiatives. The observer stressed that the revised proposal had addressed a number of concerns expressed by delegations at the previous sessions, and expressed disappointment regarding the lack of time allocated at this session to discuss the proposal to establish the IMRB/F.

7.86 In this regard, the Committee noted that the proposed IMRB/F would be further considered as part of the basket of candidate mid-term measures in the context of phase II of the Work plan for the development of mid- and long-term measures.

7.87 The Committee noted that the timing for the conduct of a comprehensive impact assessment of (a basket of) measures in application of MEPC.1/Circ.885, as might be amended, would need to be further considered in due course.

7.88 The delegation of Japan suggested that the Secretariat should consider carrying out a technical study on technology development outlook of zero-emission vessels and zero-emission fuels to assess overall technology readiness levels (TRLs) and access to those technologies in all parts of the world, as well as supply and demand of low- and zero-carbon fuels.

7.89 The delegation of the Cook Islands requested the proponents of mid-term measures to clarify in the further consideration of the basket of mid-term GHG reduction measures under phase II of the Work plan whether their proposals would apply a well-to-wake or rather a tank-to-wake approach. The delegation further suggested the need to adjust the carbon emission factor for a carbon pricing system should a well-to-wake approach be applied.

7.90 Following the discussion, the Committee agreed to refer documents MEPC 78/7/3, MEPC 78/7/5 and MEPC 78/7/21 to ISWG-GHG 13 for further consideration.

7.91 The Committee endorsed the conclusion of the ISWG-GHG 12 on this matter, as set out in paragraph 105 of document MEPC 78/WP.6, in particular, that ISWG-GHG 12 had finalized the consideration of the various proposals for mid-term measures under phase I of the Work plan for the development of mid-term measures and was now advancing to further development of a "basket of candidate mid-term measures" under phase II of the Work Plan.

7.92 The Committee, having noted the need for additional information on the proposed mid-term measures, encouraged proponents of measures to work together intersessionnally with a view to exploring how different elements of these proposals could be combined in the context of a basket of mid-term GHG reduction measures, and invited Member States and international organizations to submit new documents to a future session of ISWG-GHG, including refined proposals to that purpose.

7.93 The statement made by the observer from WSC is set out in annex 28.

How to address the increasing workload on reduction of GHG emissions from ships and proposals for possible alternative working arrangements

7.94 The Committee noted the Group's discussion on how to address the increasing workload on reduction of GHG emissions from ships and proposals for possible alternative working arrangements.

7.95 In this regard, the delegation of Australia, supported by others, in recalling that the Organization had been considering GHG working arrangements for over six years without any concrete progress, requested the establishment of a correspondence group at this session for further discussions on working arrangements as, in their view, this would allow for a timely, transparent and inclusive discussion on addressing the excessive workload in the Committee and in ISWG-GHG on all GHG-related workstreams.

7.96 Other delegations, in acknowledging the heavy workload on the various GHG workstreams and that current working arrangements were not perfect, especially for delegations that were not based in Europe, highlighted the need to have sufficient time for the preparatory work in between ISWG-GHG meetings and to strictly comply with the Committees' methods of work. Several delegations recommended that any consideration on how to address the increasing workload on reduction of GHG emissions from ships should be given after the resumption of in-person meetings.

7.97 Following consideration, the Chair recalled that ISWG-GHG 12 had invited Member States, international organizations and the Secretariat to submit relevant documents to a future session on this matter, also taking into account documents submitted to ISWG-GHG 12 and the discussions at that session.

Outcome of ISWG-GHG 11

7.98 The Committee noted that the eleventh meeting of the Intersessional Working Group on Reduction of GHG Emissions from Ships (ISWG-GHG 11) had been held remotely from 14 to 18 March 2022, and that its report had been submitted to it as document MEPC 78/WP.5.

7.99 Having considered the report of ISWG-GHG 11 (MEPC 78/WP.5), the Committee approved it in general and took action as described below.

Development of draft guidelines on life cycle GHG intensity of marine fuels (LCA guidelines)

7.100 The Committee noted the Group's discussion on the development of draft guidelines on life cycle GHG intensity of marine fuels (LCA guidelines).

7.101 In connection with the development of the draft LCA guidelines, the Committee considered documents MEPC 78/7/19 and MEPC 78/INF.25 (Solomon Islands et al.) containing a proposal for how to calculate well-to-wake carbon dioxide equivalent emissions from marine fuels using both 100-year Global Warming Potential (GWP100) and 20-year Global Warming Potential (GWP20) for comparative purposes as part of the IMO LCA guidelines.

7.102 In the ensuing discussion, all delegations that spoke supported the outcome of ISWG-GHG 11 on this issue. Several delegations acknowledged the positive atmosphere of collaboration among ISWG-GHG members and encouraged Member States and international organizations to continue to cooperate constructively in the development of draft LCA guidelines.

7.103 Several delegations highlighted the importance of life cycle assessment (LCA) of emissions for the further decarbonization of shipping, and that future IMO GHG reduction measures should take into account well-to-wake emissions. In this context, these delegations stated that it was of utmost importance for the Organization to make progress in developing and finalizing the draft LCA guidelines, and supported the draft terms of reference for the establishment of a correspondence group on marine fuel life cycle GHG analysis prepared by ISWG-GHG 11.

7.104 Several delegations, in referring in particular to documents MEPC 78/7/19 and MEPC 78/INF.25, recalled that the IPCC *Special Report on Global Warming of 1.5* °C had recognized that limiting global warming to 1.5 °C with no or limited overshoot would involve deep reductions in emissions of methane and Black Carbon (35% or more of both by 2050 relative to 2010). In this context, these delegations highlighted the need to understand both the mid- and long-term impact of emissions from shipping and recommended that the draft LCA guidelines include a method to calculate well-to-wake CO₂ equivalent (CO₂e) emissions from marine fuels using both GWP100 and GWP20 for comparative purposes and a table with corresponding values for both GWP100 and GWP20 for both carbon dioxide, methane, nitrous oxide and Black Carbon, as set out in document MEPC 78/7/19.

7.105 Several other delegations, in recalling that ISWG-GHG 11 had agreed to further consider developing guidance on how to calculate CO_2e based on GWP100 and GWP20 for comparative purposes and had reiterated its request for the submission of concrete proposals in this regard (MEPC 78/WP.5, paragraph 58), suggested further consideration of documents MEPC 78/7/19 and MEPC 78/INF.25 in the correspondence group, while deferring consideration of the inclusion of Black Carbon in the draft LCA guidelines to a later stage.

7.106 The delegation of France, supported by others, in noting the tight time frame between MEPC 78 and MEPC 79 to achieve a meaningful outcome in the correspondence group and the need to mobilize a wide array of experts in the work, suggested that the correspondence group produce an interim report to MEPC 79, allowing for additional guidance to be provided to the correspondence group by the Committee, as necessary, and to submit a final report to MEPC 80.

7.107 The delegation of Argentina, supported by others, expressed concerns regarding the consideration of important matters in correspondence groups, and that it would hinder the participation of developing countries which were not fully able to participate in all groups due to limited resources.

7.108 In noting these concerns, the Chair recalled that the use of correspondence groups was established within the Organization and Method of Work of the Committee, which stated that normally, the Committees and subsidiary bodies should not establish more than three correspondence groups, although this number could be increased where the urgency of the matter under consideration so justified.

7.109 Following consideration, the Committee established a Correspondence Group on Marine Fuel Life Cycle GHG Analysis, under the coordination of China, Japan and the European Commission,³ with the following terms of reference:

"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, document MEPC 78/INF.25, 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;
- ³ Dr. Shuang ZHANG Associate Professor Dalian Maritime University, China Email: zhangshuang_dmu@163.com

Mr. Yusuke KAWAI Chief Researcher, Regulation Unit, Japan Ship Technology Research Association (JSTRA) Email: kawai@jstra.jp

Ms. Petra DOUBKOVA Policy analyst – Maritime transport European Commission – DG Mobility & Transport (MOVE) Email: petra.doubkova@ec.europa.eu

- .2 further consider sustainability criteria issues and further develop the Fuel Life Cycle Label (FLL), 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;
- .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 an interim written report to MEPC 79, to be first considered by ISWG-GHG 13, and a final report to MEPC 80."

7.110 The Committee agreed to relax the deadline for submission of the interim report of the Correspondence Group on Marine Fuel Life Cycle GHG Analysis by the nine-week document deadline of MEPC 79 (tentatively set on Friday, 7 October 2022).

Assessment of impacts on States

7.111 The Committee noted the Group's discussion on how to keep the impacts on States of the short-term measure under review.

7.112 The Committee also noted the Group's discussion on the lessons-learned exercise of the comprehensive impact assessment of the short-term measure and the need for further work by ISWG-GHG with a view to finalization of the lessons-learned exercise by MEPC 79.

7.113 The Committee noted the progress made by the Group on the development of methodological and process elements in the context of revision of the *Procedure for assessing impacts on States of candidate measures*, as set out in annex 2 to document MEPC 78/WP.5.

7.114 In the ensuing discussion, several delegations, in order to ensure that "no one be left behind", highlighted that much remained to be done on the issue of addressing negative impacts of candidate measures on States, in particular developing States, including SIDS and LDCs. These delegations stressed in particular the need to take duly into account the potential negative impacts of candidate measures on States and that the provision of assistance in assessing impacts on States, although necessary, was not sufficient to ensure a just and equitable transition. Several delegations, in noting that mid-term GHG reduction measures would involve a wide array of aspects that related to fair transition (e.g. access to technology for the production and supply of alternative zero-carbon fuels, access to financial support for the bunkering and port infrastructure developments), recalled the key importance of finalizing the revision of the *Procedure for assessing impacts on States of candidate measures* (MEPC.1/Circ.885) at MEPC 79 for a future comprehensive impact assessment.

7.115 One delegation encouraged interested delegations to cooperate intersessionally with a view to clarifying the concept and improving the collective understanding of the implications of a "fair transition" for shipping.

7.116 Several delegations requested the Secretariat to provide a platform for dialogue and exchange of views between IMO Member States and UNCTAD and other relevant organizations on the technical aspects of the conduct of impact assessments, such as areas of identified missing data, also covering trade in developing States, in particular SIDS and LDCs. One delegation suggested that holding an information session or a symposium on this issue might facilitate the discussion at MEPC 79.

7.117 Following consideration, the Committee invited interested Member States and international organizations to submit concrete proposals on the above-mentioned issues to a future session of ISWG-GHG.

Revision of the IMO DCS

7.118 The Committee noted the Group's discussion on the revision of the IMO Ship Fuel Oil Consumption Data Collection System.

7.119 Following consideration, the Committee approved the draft amendments to appendix IX of MARPOL Annex VI to include more information on the ship's carbon intensity performance in the IMO Ship Fuel Oil Consumption Data Collection System, as set out in annex 7, and requested the Secretary-General to circulate them in accordance with MARPOL article 16(2), with a view to adoption at MEPC 79.

7.120 The Committee approved a dedicated workstream on the revision of the IMO Ship Fuel Oil Consumption Data Collection System and invited interested Member States and international organizations to submit concrete proposals to a future session of ISWG-GHG.

GHG TC-Trust Fund

7.121 Having recalled that the GHG TC-Trust Fund established by MEPC 74 funded the *Fourth IMO GHG Study 2020*, the comprehensive impact assessment of the short-term measure and a new study on maritime transport costs in the Pacific islands region, 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 developing States, in particular SIDS and LDCs, in the implementation of the Initial Strategy.

7.122 Several delegations welcomed the conduct of a study on the analysis of maritime transport costs in the Pacific region through the GHG TC-Trust Fund.

7.123 The delegation of the Cook Islands expressed its appreciation to the stakeholder analysis carried out as part of the comprehensive impact assessment of the short-term measure, which paid particular attention to the trade of essential goods, and recommended that such an analysis could also be carried out for other developing States, in particular SIDS and LDCs.

7.124 In this regard the Committee noted with appreciation the announced contributions to the GHG TC-Trust Fund by Denmark (\$100,000) and by Japan, funded by the Nippon Foundation (¥50,000,000).

Proposals related to onboard CO₂ capture

7.125 The Committee had for its consideration document MEPC 76/7/17 (Republic of Korea), which had been deferred from earlier sessions, suggesting two options to amend current EEDI/EEXI calculation formulars to allow reflecting CO_2 emissions reduction from CO_2 captured on board (CO_2 removal).

7.126 The Committee thanked the Republic of Korea for the document and the proposals set out therein.

7.127 In the ensuing discussion, several delegations, in noting that CO_2 capture was used in the oil and gas industry and that a number of onboard CO_2 capture projects had recently been announced in the shipping industry, stated that the Organization should contribute to raising awareness, to improve the collective understanding on this issue and to send clear signals to the industry to encourage technology development in onboard CO_2 capture, as it represented a promising and cost-effective means to reach carbon neutrality.

7.128 Several delegations were generally supportive of the further consideration of onboard CO_2 capture within the EEDI/EEXI framework. In this regard, several delegations suggested that the Committee invite interested Member States to submit data from existing onboard CO_2 capture technologies along with proposals to amend the *2013 Guidance on treatment of innovative energy efficiency technologies for calculation and verification of the attained EEDI* (MEPC.1/Circ.815) and the *2018 Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI) for new ships* (resolution MEPC.308(73)) to future sessions. One delegation stated that further discussion based on additional technical information was necessary, and mentioned points that merited further clarification, e.g. whether the CO_2 storage tank capacity should be reflected in the EEDI and the EEXI calculation and how to verify the availability factor of the system.

7.129 Several delegations observed that, as the emissions reduction obtained by onboard CO_2 capture technology was strongly dependent on fuel consumption and whether the technology was operational and continually in use, it should be considered in relation to the IMO Data Collection System and the LCA Guidelines in order to rely on adequate certification schemes for the continuous use of the technology and the final CO_2 storage. One delegation suggested that onboard CO_2 capture might be considered both under the EEDI/EEXI and the CII rating frameworks. One delegation recalled in this regard that a similar proposal to incorporate onboard CO_2 capture in the CII framework had previously been rejected by ISWG-GHG 8.

7.130 Several delegations, while recognizing that onboard CO_2 capture might play a role in reducing GHG emissions from international shipping, expressed the view that it was premature to incorporate onboard CO_2 capture in the IMO regulatory framework, and highlighted that clear guidance on calculation and verification should be agreed first to ensure the efficacy and robustness of onboard CO_2 capture systems, in particular to ensure that captured CO_2 would be safely stored, to ensure reasonable accounting and avoid double counting in case CO_2 was re-used on board, and to ensure its sustainable delivery into port reception facilities for permanent storage or use.

7.131 Several delegations, in considering the low level of technological maturity of onboard CO_2 capture for commercial application on ships and that significant R&D efforts were still needed to advance the technology readiness level (TRL) of this technology, were not in a position to support the proposal to reflect onboard CO_2 capture in the EEDI and EEXI framework but suggested prioritizing the work of the Organization on reducing GHG emissions rather than capturing them in the exhaust.

7.132 Following consideration, given the interest for further consideration of the concept of onboard CO_2 capture, the Committee invited interested Member States and international organizations to submit further information and concrete proposals to future sessions.

7.133 The statement made by the delegation of the Republic of Korea is set out in annex 28.

Terms of reference for ISWG-GHG 13

7.134 The Committee, having considered the draft terms of reference prepared by ISWG-GHG 12, and taking into account the progress made at this session, approved the terms of reference for ISWG-GHG 13 as follows:

"The Intersessional Working Group on Reduction of GHG Emissions from Ships is instructed, taking into account relevant documents submitted to ISWG-GHG and MEPC, including to MEPC 79, and views expressed during MEPC 78, to:

- .1 complete the lessons-learned exercise of the comprehensive impact assessment of the short-term measure, and in particular finalize the review of the *Procedure for assessing impacts on States* of candidate measures (MEPC.1/Circ.885), taking into account the draft process and methodological elements to complement the *Procedure for assessing impacts on States of candidate measures* set out in annex 2 to the ISWG-GHG 11 report together with the views expressed during that meeting (document MEPC 78/WP.5);
- .2 further consider concrete proposals on the revision of the Initial Strategy, and initiate the development of a Revised Strategy using the Initial Strategy as the base document;
- .3 further consider a basket of candidate mid-term measures in the context of Phase II of the Work plan for the development of mid- and long-term measures;
- .4 consider concrete proposals on how to keep the impacts of the short-term measure under review;
- .5 consider the interim report of the Correspondence Group on Marine Fuel Life Cycle GHG Assessment;
- .6 further consider the revision of the ship fuel oil consumption Data Collection System (DCS); and
- .7 submit a written report to MEPC 79."

Matters deferred to MEPC 79

7.135 As proposed in document MEPC 78/1/1 (annex 4), the Committee agreed to defer the consideration of documents MEPC 78/7/17 (Liberia) and MEPC 75/7/10 (FOEI, et al.) to MEPC 79.

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

Outcome of PPR 9

8.1 With regard to the outcome of PPR 9, the Committee had for its consideration document MEPC 78/9/1, paragraphs 2.17 to 2.21, containing the action points for the Committee regarding marine plastic litter from ships.

Marking of fishing gear

8.2 In relation to the marking of fishing gear, the Committee recalled that, at its previous session, it had forwarded documents MEPC 75/8/1 (FAO), MEPC 75/8/2 (FAO), MEPC 75/8/4 (Vanuatu) and MEPC 77/8/2 (Japan and United Kingdom) to PPR 9 and had instructed the Sub-Committee to further consider the potential regulatory (mandatory and recommendatory) options for promoting marking of fishing gear, taking into account the work of FAO, with a view to advising the Committee on how to proceed.

8.3 In this connection, the Committee noted that PPR 9 had agreed that an MEPC circular could be developed by the Sub-Committee as a short-term measure to promote the implementation of fishing gear marking systems and the FAO Voluntary Guidelines for the Marking of Fishing Gear, taking into account additional work by FAO, such as the technical manual on marking of fishing gear being developed by FAO.

8.4 The Committee also noted that divergent views on the potential regulatory options with regard to marking of fishing gear and on the feasibility of making marking of fishing gear mandatory had been expressed at PPR 9.

8.5 Furthermore, the Committee noted the need for clarity on high-level policy for the Sub-Committee to progress its future work in this regard in an effective manner and that it had been invited by PPR 9 to provide further advice to the Sub-Committee on possible regulatory options for addressing marking of fishing gear, taking into account:

- .1 the proposed mandatory goal-based approach to be developed under the framework of MARPOL Annex V, as proposed in document MEPC 75/8/4 and further elaborated in document PPR 9/15;
- .2 the alternative voluntary approach as described in document MEPC 77/8/2, focusing on enhanced cooperation with FAO and regional fisheries management organizations (RFMOs);
- .3 the legal advice provided by the Secretariat on available options (PPR 9/15/6); and
- .4 relevant information provided by FAO, including the statement by FAO annexed to the Sub-Committee's report and the report of MEPC 77.

8.6 During discussion, the majority of delegations supported the proposal in document MEPC 75/8/4 to make the marking of fishing gear mandatory through MARPOL Annex V. Those delegations expressed the view that a goal-based standard, comprised of one goal and associated functional requirements, would provide flexibility to Administrations when developing national legislation. In particular, several delegations expressed the view that the expertise of IMO in developing such standards, in combination with the expertise of FAO in fisheries and fishing gear, and input from Member States and RFMOs that had already

introduced requirements for the marking of fishing gear, would result in the development of a sufficiently flexible global regulatory framework for mandatory fishing gear marking that could accommodate the diversity of fisheries, fishing gear and considerations that might need to be taken into account.

8.7 In this connection, those delegations also expressed the view that the main legal provision relating to abandoned, lost, or otherwise discarded fishing gear (ALDFG) was contained in MARPOL Annex V, which prohibited the discharge of fishing gear in the marine environment, as fishing gear might become garbage if released and not retrieved.

8.8 The statement made by the delegation of Vanuatu is set out in annex 28.

8.9 Several other delegations expressed the view that the proposal for a mandatory requirement for the marking of fishing gear was premature at this stage, due to the challenges associated with implementing such a measure, in particular for developing countries, including, inter alia, the lack of a global vessel registration system, the number of technical difficulties with implementation of such a measure, and the diversity of fisheries and fishing gear, and that a mandatory regulation would cause confusion among the fishing industry and the competent ministry for fishing within Member States.

8.10 Some of those delegations also expressed concerns about fishing regulations being developed by IMO, expressing the view that IMO was not the expert body on fishing nor necessarily the appropriate body to develop such regulations. In this connection, one delegation suggested that FAO was the competent body, and that the question of the competent body, i.e. FAO or IMO, might need to be addressed by the Legal Committee.

8.11 Additionally, some delegations were of the view that the matter of marking of fishing gear would be better addressed via regional fisheries management organizations (RFMOs) and/or domestic entities with appropriate expertise. In this regard, one delegation cautioned against a "patchwork" approach, and highlighted this was a global matter.

8.12 While recognizing the urgent need to address ALDFG, some delegations supported voluntary measures only at this stage, including the development of an MEPC circular to promote the implementation of fishing gear marking systems and the FAO Voluntary Guidelines for the Marking of Fishing Gear. Some delegations supported a two-stage approach, in which non-binding measures would be promoted at this time, and that any future mandatory regulations should take into account experience with existing measures, and the identification of the appropriate competent body to develop such measures, with additional consideration for the most effective and appropriate instrument, and should focus on a global approach.

8.13 Having considered the views expressed on this matter, the Committee agreed with the approach proposed in document MEPC 75/8/4, namely that a goal-based requirement under MARPOL Annex V for the mandatory marking of fishing gear should be developed. Subsequently, the Committee instructed the PPR Sub-Committee to develop draft amendments to MARPOL Annex V and associated guidelines accordingly.

8.14 With regard to this decision, the delegation of Argentina made a statement, which is set out in annex 28.

8.15 The Committee invited Member States to submit information on the implementation of fishing gear marking systems, including how the diversity of fisheries and fishing gear had been accommodated, specific technical or legal considerations that had been taken into

account, and other relevant experience regarding fishing gear marking to help inform the process of developing a mandatory goal-based requirement.

8.16 Recognizing the importance of also taking action in the near-term with regard to ALDFG, the Committee also instructed the PPR Sub-Committee to develop an MEPC circular to promote the implementation of fishing gear marking systems and the FAO Voluntary Guidelines for the Marking of Fishing Gear, taking into account additional work by FAO, such as the technical manual on marking of fishing gear being developed by FAO.

8.17 The Committee further invited the Secretariats of FAO and IMO to continue to cooperate closely, with a view to keeping the Committee informed of relevant joint capacity-building activities and work being carried out by FAO.

Garbage Record Book – draft amendments to MARPOL Annex V

8.18 The Committee noted that PPR 9 had prepared draft amendments to MARPOL Annex V to make the Garbage Record Book mandatory also for ships of 100 gross tonnage and above and less than 400 gross tonnage.

8.19 Following consideration, the Committee approved the draft amendments to MARPOL Annex V to make the Garbage Record Book mandatory also for ships of 100 gross tonnage and above and less than 400 gross tonnage, as set out in annex 18, and requested the Secretary-General to circulate them in accordance with MARPOL Article 16(2), with a view to adoption at MEPC 79.

Reducing the environmental risk of plastic pellets transported by ships

8.20 With regard to the reduction of the environmental risk of plastic pellets transported by ships, the Committee noted that:

- .1 interested Member States and international organizations were invited to submit documents with draft guidelines on best practices related to response to and the clean-up of plastic pellet spills to a future session of the PPR Sub-Committee; and
- .2 document MEPC 77/8/3 (Sri Lanka), together with other relevant documents submitted to the Sub-Committee, would be further considered by a correspondence group and all possible options on how to reduce the environmental risk of plastic pellets transported by ships would be reviewed.

Other matters related to marine plastic litter

Review the terms of reference for the IMO Study on Marine Plastic Litter from Ships

8.21 The Committee recalled that, at its previous session, it 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 the outcomes of the GESAMP WG 43 report, and to advise MEPC 78 on how the Study could progress, such that MEPC 78 could make adjustments to the terms of reference as required.

8.22 Having considered document MEPC 78/8/1 (Secretariat), reporting on efforts to engage a consultant to review the terms of reference for the IMO Study on Marine Plastic Litter, the Committee thanked the Secretariat for the update and noted that the report on the review

of the terms of reference for the IMO Study on Marine Plastic Litter from Ships would be submitted to MEPC 79.

Phased reduction on usage and carriage of materials made of single-use plastics on Indian-flagged ships

8.23 The Committee noted that the Indian Maritime Administration had introduced, from October 2019, a phased reduction on usage and carriage of materials made of single-use plastics on Indian-flagged ships as a proactive measure, and also noted the findings of the survey that had been conducted two years after the introduction of the measure, as reported in document MEPC 78/8 (India).

Research publications on marine plastic litter, including microplastics

8.24 The Committee noted the information in document MEPC 78/INF.15 (Germany), on research conducted in Germany and international research involving institutes from Germany on the subject of marine plastic litter, including microplastics.

9 POLLUTION PREVENTION AND RESPONSE

Matters considered by correspondence prior to the virtual meeting

9.1 In accordance with the arrangements of the remote session, as outlined in document MEPC 78/1/1 (paragraphs 12 to 15) and its annex 3 (section 5 on agenda item 9), the Committee considered by correspondence, prior to the virtual meeting, document MEPC 78/9/1 (Secretariat), setting out the action requested of the Committee in connection with matters emanating from the ninth session of the PPR Sub-Committee (paragraphs 2.1 to 2.5, 2.9, 2.10 and 2.30 only). The Committee recalled that the action requested of it under paragraphs 2.6, 2.11 to 2.13, and 2.16 to 2.29 of document MEPC 78/9/1 had been considered under other agenda items as follows:

- .1 MEPC 78/9/1, paragraphs 2.6, 2.25 and 2.26 had been considered under agenda item 4 (Harmful aquatic organisms in ballast water) (see paragraphs 4.8, 4.9 and 4.36);
- .2 MEPC 78/9/1, paragraphs 2.11 to 2.13, 2.22 to 2.24, and 2.29 had been considered under agenda item 5 (Air pollution prevention) (see paragraphs 5.5 to 5.18);
- .3 MEPC 78/9/1, paragraphs 2.17 to 2.21 had been considered under agenda item 8 (Follow-up work emanating from the Action Plan to Address Marine Plastic Litter from Ships) (see paragraphs 8.1 to 8.20); and
- .4 MEPC 78/9/1, paragraphs 2.16, 2.27 and 2.28 had been considered under agenda item 14 (Work programme of the Committee and subsidiary bodies) (see paragraphs 14.12 to 14.14).

9.2 During the virtual meeting, the Committee reconfirmed the Chair's proposals in annex 3 to document MEPC 78/1/1, as set out in the following paragraphs 9.3 to 9.14.

Safety and pollution hazards of chemicals

- 9.3 With regard to the categorization of liquid substances, the Committee:
 - .1 concurred with the evaluation of products and their respective inclusion in lists 1, 2, 3 and 5 of MEPC.2/Circ.27 (issued on 1 December 2021), with validity for all countries and with no expiry date, where appropriate;
 - .2 noted that advice on how to assess mixtures against the criteria for the discharge requirement in regulation 13.7.1.4 of MARPOL Annex II had been provided by GESAMP/EHS 58 (as set out in paragraph 5.4 of the report of GESAMP/EHS 58 that had been disseminated as PPR.1/Circ.11) and would be taken into consideration by the PPR Sub-Committee and the ESPH Technical Group, on a case-by-case basis, when assessing mixtures to which special requirement 16.2.7 of the IBC Code might be applicable;
 - .3 concurred with the evaluation of cleaning additives and their inclusion in annex 10 to MEPC.2/Circ.27;
 - .4 noted that prior to MEPC.2/Circ.27 being issued, a review had been undertaken by ESPH 27 and amendments had been made, including the deletion of products that had reached their expiry dates, or were no longer shipped, or had been re-evaluated and met the criteria for complex mixtures in paragraph 9.2 of the *Guidelines for the provisional assessment of liquid substances transported in bulk* (MEPC.1/Circ.512/Rev.1); and
 - .5 urged reporting countries that had products listed in list 2 or list 3 of the MEPC.2 circular on Provisional categorization of liquid substances in accordance with MARPOL Annex II and the IBC Code to contact the respective manufacturers and request them to review their products for the purpose of assessing whether any changes in the carriage requirements were necessary, taking into account the revised chapter 21 of the IBC Code, GESAMP Hazard Profiles the latest for the components, MEPC.1/Circ.512/Rev.1 and PPR.1/Circ.10.

Inventory of Hazardous Materials under the Hong Kong Convention

9.4 The Committee concurred with the view that there was no need for an update to the list of materials for the Inventory of Hazardous Materials under the Hong Kong Convention to include cybutryne following the entry into force of the respective controls, as the existing relevant text in appendix I to the Hong Kong Convention was generic enough.

9.5 Nevertheless, the Committee noted that there might be a need to consider amending the 2015 Guidelines for the development of the Inventory of Hazardous Materials (resolution MEPC.269(68)), which contained more specific guidance but was so far limited to organotin compounds.

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

9.6 The Committee noted that, following consideration of document MEPC 77/14/2 (China), along with a commenting document and the relevant comments made at MEPC 77, PPR 9 had invited interested Member States and international organizations to submit a proposal to the Committee for a new output on development of amendments to 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 onboard pollution prevention equipment.

Matters considered during the virtual meeting

Updated guidelines for brief sampling, inspection, and survey and certification of anti-fouling systems on ships

9.7 Having considered the draft updated guidelines concerning anti-fouling systems on ships, as prepared by PPR 9 following the adoption by MEPC 76 of amendments to the AFS Convention introducing controls on cybutryne, the Committee adopted the following MEPC resolutions:

- .1 MEPC.356(78) on 2022 Guidelines for brief sampling of anti-fouling systems on ships, as set out in annex 19;
- .2 MEPC.357(78) on 2022 Guidelines for inspection of anti-fouling systems on ships, as set out in annex 20; and
- .3 MEPC.358(78) on 2022 Guidelines for survey and certification of anti-fouling systems on ships, as set out in annex 21.

9.8 In addition, the Committee instructed the III Sub-Committee to review the 2022 *Guidelines for inspection of anti-fouling systems on ships*, with a view to them being added as a new appendix to a future version of the Procedures for Port State Control in accordance with the methodology agreed by the Committees.

Draft amendments to MARPOL and associated guidelines to allow States with ports in the Arctic region to enter into regional arrangements for port reception facilities

- 9.9 The Committee approved the draft amendments to:
 - .1 MARPOL Annexes I, II and IV, set out in annex 22;
 - .2 MARPOL Annex V, set out in annex 18; and
 - .3 MARPOL Annex VI, set out in annex 7,

concerning regional reception facilities in the Arctic, and requested the Secretary-General to circulate them in accordance with MARPOL Article 16(2), with a view to adoption at MEPC 79.

9.10 In this connection, the Committee approved, in principle, the draft amendments to the 2012 Guidelines for the development of a regional reception facility plan (resolution MEPC.221(63)) along with the associated draft MEPC resolution, as set out in annex 9 to document PPR 9/21/Add.1, and requested the Secretariat to submit the draft amendments together with the associated draft MEPC resolution to MEPC 79, under agenda item 3 (Consideration and adoption of amendments to mandatory instruments), with a view to adoption in conjunction with the adoption of the relevant amendments to MARPOL Annexes I, II, IV, V and VI.

Review of the IBTS Guidelines and amendments to the IOPP Certificate and Oil Record Book

9.11 The Committee recalled that consideration of the outcome of PPR 7 on the review of the IBTS Guidelines and amendments to the IOPP Certificate and Oil Record Book (MEPC 75/10/Add.1, paragraph 3.6) had been pending since MEPC 75.

- 9.12 In this regard, the Committee had for its consideration:
 - .1 the draft MEPC circular on the 2020 Guidelines for systems for handling oily wastes in machinery spaces of ships incorporating guidance notes for an integrated bilge water treatment system (IBTS), as set out in annex 13 to document PPR 7/22/Add.1;
 - .2 the draft amendments to appendix II (Form of the IOPP certificate and Supplements) and appendix III (Form of Oil Record Book) of MARPOL Annex I, as set out in annex 14 to document PPR 7/22/Add.1; and
 - .3 the draft revised MEPC circular on Guidance for the recording of operations in the Oil Record Book Part I machinery space operations (all ships), as set out in annex 15 to document PPR 7/22/Add.1.

9.13 The Committee recalled that PPR 7 had requested it to consider the updated IBTS Guidelines, the draft amendments to the IOPP Certificate, and the draft revised Guidance for the recording of operations in the Oil Record Book, as a package, with a view to deciding whether they could be approved.

9.14 In addition, the Committee had for its consideration the following documents concerning this matter:

- .1 MEPC 78/9 (IACS), expressing the view that the question of the acceptability of forced evaporation of bilge water for the purposes of disposal needs clarification and that if the Committee decided that it was not acceptable, the prohibition should be clearly reflected in the MARPOL Convention; and supporting the proposed deletion of example 10-1 in the draft ORB guidance and a change in figure 2 of appendix 1 to the draft 2020 IBTS guidelines, as proposed by INTERTANKO in document MEPC 76/9/5;
- .2 MEPC 76/9/5 (INTERTANKO), commenting that updating the form of the IOPP Certificate and the form of the Oil Record Book to reflect the development of technology and practices to reduce the burden on shipboard engineers and oil filtering equipment was in line with prior practices of MEPC to provide for accurate record-keeping and transparency with regard to the proper management of oily wastes on ships; proposing that the draft changes to section 3.4 in the Supplement of the IOPP Certificate (Form B) to indicate other acceptable means for the disposal of oily bilge water should be retained; and also proposing the deletion of new example 10-1 in the draft ORB guidance and a change in figure 2 of appendix 1 to the draft 2020 IBTS guidelines; and
- .3 MEPC 75/10/4 (IACS), proposing modifications to the draft 2020 IBTS guidelines, specifically changes to paragraph 6.3 to clarify to which system the integral pump is connected to, if fitted; amendments to paragraph 4.3.2 of appendix 1 to align it with figure 2; and moving sections 4.5 and 4.6 of appendix 1 to the end of section 7.

9.15 In the ensuing discussion, several delegations supported the following views in relation to forced evaporation of oily bilge water as a means of reducing the water in the oily bilge water system:

- .1 the concept of managing water in oily residues through the process of evaporation was well-established and was an accepted practice already undertaken to manage water in the oil residue sludge system;
- .2 the application of the same concept used in the oil residue sludge system to the bilge system was a logical progression; and it was an effective means of reducing the water in the oily bilge water system; and
- .3 the original proposal for the output on "Review of the IBTS Guidelines and amendments to the IOPP Certificate and Oil Record Book", as contained in document MEPC 70/15/4 (Liberia et al.), sought to address, inter alia, recording of oily bilge water holding tank incineration, evaporation and transfers to the slop tank; therefore, the key issue that was raised at MEPC 70 was not the question of evaporation but the proper and transparent management and record-keeping of this process.

9.16 Some delegations were opposed to forced evaporation of oily bilge water as an acceptable means of disposal and supported the introduction of a provision in MARPOL Annex I to prohibit the practice.

- 9.17 One delegation expressed the view that:
 - .1 the risks associated with forced evaporation required careful evaluation;
 - .2 the draft revised IBTS Guidelines did not constitute sufficiently clear technical guidance to include the option of forced evaporation as an approved means of disposal of oily bilge water in Form B of the Supplement to the IOPP Certificate; and
 - .3 in the absence of expounding requirements in MARPOL Annex I, the option of employing forced evaporation of oily bilge bore the risk of misuse and misinterpretation.

9.18 Following consideration of the outcome of PPR 7 on this matter, the relevant documents that had been submitted, and the comments made during the discussion at this session, the Committee agreed, in principle, that forced evaporation was acceptable as a means for the disposal of oily bilge water and invited proposals to PPR 10 to add an appropriate regulation in MARPOL Annex I accordingly.

9.19 In addition, the Committee forwarded documents MEPC 75/10/4, MEPC 76/9/5 (paragraphs 12 to 19) and MEPC 78/9 (paragraphs 5 to 7) to PPR 10 for further consideration, with a view to output 2.13 on (Review of the IBTS Guidelines and amendments to the IOPP Certificate and Oil Record Book) being completed by the target completion year of 2023.

10 REPORTS OF OTHER SUB-COMMITTEES

10.1 In accordance with the arrangements of the remote session, as outlined in document MEPC 78/1/1 (paragraphs 12 to 15) and its annex 3 (section 6 on agenda item 10), as updated in document MEPC 78/1/1/Add.1, paragraphs 10 to 12, the Committee considered by correspondence, prior to the virtual meeting, the relevant outcomes of SDC 8, HTW 8 and III 7.

10.2 During the virtual meeting, the Committee reconfirmed the endorsement of the Chair's proposals in annex 3 to document MEPC 78/1/1, as updated in document MEPC 78/1/1/Add.1, as set out in the following paragraphs 10.3 to 10.12.

Outcome of SDC 8

Guidelines on underwater noise

10.3 The Committee noted the progress made at SDC 8 on the review of the *Guidelines* for the reduction of underwater noise from commercial shipping to address adverse impacts on marine life (MEPC.1/Circ.833), including the agreed work plan for its revision and the identification of next steps.

Outcome of HTW 8

Checklist for human element issues

10.4 The Committee concurred with the decision of MSC 105 to approve the draft revised checklist for considering and addressing human element issues and associated draft amendments to the *Organization and method of work of the Maritime Safety Committee and the Marine Environment Protection Committee and their subsidiary bodies*, and the associated draft MSC-MEPC circular, to be issued as MSC-MEPC.1/Circ.5/Rev.3.

Fishing vessel personnel training on marine environmental awareness

10.5 The Committee noted that provisions to ensure that all fishing vessel personnel receive appropriate training on marine environmental awareness, focused on marine plastic litter and abandoned, lost or otherwise discarded fishing gear, had been included in the draft new STCW-F Code, as instructed by MEPC 74.

Training provisions for seafarers related to the BWM Convention

10.6 The Committee noted the progress made at HTW 8 in relation to output 6.11 (Development of training provisions for seafarers related to the BWM Convention).

Outcome of III 7

Analysis of consolidated audit summary reports

10.7 With regard to the outcome of the analysis of the four consolidated audit summary reports (CASRs) under the IMO Member State Audit Scheme (IMSAS), the Committee took action as set out in the following paragraphs 10.8 to 10.11.

10.8 The Committee concurred with the decisions of MSC 105 (MSC 105/WP.1/Rev.1, paragraph 13.10) to:

- .1 endorse the outcome of the analysis of the four CASRs, regarding the five main areas of recurrent findings and observations, the highest numbers of references recorded against the specific provisions of the mandatory IMO instruments, and the four main areas of root causes (III 7/17, paragraphs 7.13 to 7.17 and annex 4, appendices 1, 2 and 3);
- .2 concur with the format of the tracking log of the provisions recommended for review by the Committees and with the format of the overall feedback (III 7/17, paragraphs 7.28, 7.29 and 7.32 and annex 4, appendices 1 to 6)

and, in this connection, request the III Sub-Committee to include background information in relation to provisions recommended for review of appropriateness and effectiveness as part of the methodology and overall feedback in future analyses of CASRs; and

.3 agree to report to the Council on the outcome of the Committees' consideration of the four CASRs (III 7/17, paragraph 7.33) and, in this connection, request the Secretariat to provide the Council with a note containing a summary of the decisions of the Committee relating to methodology, reporting process and format of the overall feedback from the analysis of CASRs.

10.9 In addition, the Committee noted the identified areas that might need technical assistance and agreed to forward them to the Technical Cooperation Committee for consideration and reporting to the Council, as appropriate (MEPC 77/10, paragraph 2.6).

10.10 Furthermore, the Committee invited Member States to submit a proposal for a new output, taking into account the recommendation of the III Sub-Committee concerning a review of the appropriateness and effectiveness of regulation 14 of MARPOL Annex I, and recalled that PPR 9 had invited interested Member States to submit a proposal to the Committee for a new output on development of amendments to the *Revised guidelines and specifications for pollution prevention equipment for machinery space bilges of ships* (resolution MEPC.107(49)) (MEPC 77/10, paragraph 2.7; see also paragraph 9.6).

10.11 The Committee also referred the initial analysis of the criteria for determining the appropriateness and effectiveness of the identified provisions related to port reception facilities to the Technical Cooperation Committee for reporting to the Council (MEPC 77/10, paragraph 2.8).

List of certificates and documents required to be carried on board ships

10.12 The Committee concurred with the decision of LEG 109, MSC 105 and FAL 46 to approve the joint FAL.2-MEPC.1-MSC.1-LEG.2 circular on the List of certificates and documents required to be carried on board ships, 2022 to supersede FAL.2/Circ.131-MEPC.1/Circ.873-MSC.1/Circ.1586-LEG.2/Circ.3 (LEG 109/16/1, paragraph 10.2.1.8; MSC 105/20, paragraph 13.11; FAL 46/24, paragraph 23.8), noting that the square brackets surrounding the items related to the amendments to MARPOL Annexes I, IV and VI regarding measures to reduce carbon intensity of international shipping and unmanned non-self-propelled (UNSP) barges, as adopted by resolutions MEPC.330(76) and MEPC.328(76), respectively, could be removed considering that they had been accepted on 1 May 2022 in accordance with the entry-into-force procedure.

11 IDENTIFICATION AND PROTECTION OF SPECIAL AREAS, ECAs AND PSSAs

Proposal to designate the Mediterranean Sea, as a whole, as an emission control area for sulphur oxides and particulate matter

11.1 The Committee had for its consideration document MEPC 78/11 (Albania et al.), submitted by all coastal States of the Mediterranean Sea, all Member States of the European Union and the European Commission, proposing to designate the Mediterranean Sea, as a whole, as an emission control area (ECA) for sulphur oxides (SO_x) and particulate matter (Med SO_x ECA), in accordance with regulation 14 and appendix III to MARPOL Annex VI to take effect from 1 January 2025.

11.2 The co-sponsors were of the view that the designation of the proposed Med SO_x ECA was supported by a demonstrated need to prevent, reduce and control emissions of sulphur oxides and particulate matter from ships. Moreover, in the co-sponsors' view, the adoption of the proposed Med SO_x ECA would result in significant reductions in ambient levels of air pollution in the Mediterranean Sea as a whole, and in the Mediterranean coastal States, which would achieve substantial benefits to human health and the environment.

11.3 The Committee also noted document MEPC 78/11/1 (CSC) welcoming the proposed designation of the Mediterranean Sea as an ECA for sulphur oxides and particulate matter.

11.4 In the ensuing discussion, many delegations expressed their support for the proposed Med SO_x ECA, expressing appreciation for the substantial preparatory work and various supporting studies carried under the Barcelona Convention, supported by the UNEP-MAP and REMPEC, and stating that designation of the whole Mediterranean Sea as a SO_x ECA area would significantly reduce emissions from ships and improve the air quality in the region resulting in substantial benefits for human health and the environment compared to the use of fuel oils with a maximum sulphur content of 0.50%.

11.5 Several of these delegations expressed the view that, based on the information contained in the annex to document MEPC 78/11, the criteria in appendix III to MARPOL Annex VI on the designation of emission control areas had been fulfilled and that the Med SO_x ECA should take effect in early 2025.

11.6 Some other delegations, in acknowledging the work done and recognizing the health and environmental benefits of regulating the sulphur content of marine fuels, were of the view that the proposal required further clarification and information on a number of issues, including the use of more recent data sources, the possible economic impact on trade, safety issues related to fuel switch over, fuel price volatility, and availability of distillate fuels, and that these issues should be considered further by the Technical Group. One delegation expressed the view that, in reviewing the draft amendments to MARPOL Annex VI and the accompanying resolution text, the primacy of the Organization in designating emission control areas that might have an impact on international shipping and international trade in accordance with the procedure set out in MARPOL Annex VI should be recognized.

11.7 Several delegations, noting that not all the Mediterranean coastal States and co-sponsors of document MEPC 78/11 were Parties to MARPOL Annex VI, urged ratification of Annex VI by those States prior to the Med SO_x ECA taking effect to support uniform implementation. In this regard, the Committee noted the political commitment and ongoing ratification processes in these States, as also expressed in the context of the Barcelona Convention.

11.8 One delegation stated that irrespective of the value of regional agreements, IMO was the competent body, as recognized by UNCLOS, with regard to the protection and preservation of the marine environment.

11.9 As requested, statements made by the delegations of Italy, India, Slovenia and by the observers from UNEP and IPIECA are set out in annex 28.

11.10 The United Kingdom expressed support for the establishment of an emissions control area for sulphur dioxide in the Mediterranean Sea as a whole, taking particular interest in this proposal as one of the coastal States within the proposed ECA in respect of Gibraltar, and that both the UK Government and the Government of Gibraltar remained committed to tackling pollution from ships in the Mediterranean Sea.

11.11 In response to the intervention by the delegation of the United Kingdom with regard to the designation of the Mediterranean as a SO_x ECA, the delegation of Spain made a statement in which it declared that it exerted its sovereign rights and jurisdiction over its territorial waters, including all maritime areas around Gibraltar, with the only exception being the waters inside the port, which were administered by the United Kingdom pursuant to article X (10) of the Treaty of Utrecht, as declared by Spain upon signing and ratifying the United Nations Convention of the Law of the Sea. The statement made by the delegation of Spain with regard to the application of the proposed SO_x ECA is set out in annex 28.

11.12 Following the discussion, the Committee recognized the broad support for the proposed designation and associated amendments to MARPOL Annex VI, while noting the different comments and concerns. Consequently, the Committee agreed to establish a Technical Group on the Designation of Special Areas under MARPOL to review, taking into consideration the comments and concerns expressed in Plenary, the proposed designation of the Mediterranean Sea as a SO_x Emission Control Area, set out in document MEPC 78/11.

Establishment of the Technical Group on the Designation of Special Areas under MARPOL

11.13 The Committee established a Technical Group on the Designation of Special Areas under MARPOL, and instructed it, taking into account the comments and decisions made in plenary, to:

- .1 further assess the proposal to designate the Mediterranean Sea as an emission control area for sulphur oxides as proposed in document MEPC 78/11, taking into account the criteria set out in section 3 of Appendix III of MARPOL Annex VI; and
- .2 based on .1, prepare draft amendments to MARPOL Annex VI, using annex 4 to document MEPC 78/11 as the basis.

Report of the Technical Group on the Designation of Special Areas under MARPOL

11.14 The Committee considered the report of the Technical Group (MEPC 78/WP.9), approved it in general and took action as described below.

11.15 In considering the report of the Technical Group, and in particular the draft resolution accompanying the draft amendments to MARPOL Annex VI, several delegations reiterated the view that those coastal States that had not yet ratified MARPOL Annex VI should do so at their earliest convenience, and at the latest before the entry into force of the amendments. In this regard, several delegations expressed the view that, instead of the reference in the cover resolution which invited those coastal States to do so, these States should be urged to do so. One delegation, supported by others, stated that the Convention did not only confer privileges on Parties, but also imposed obligations on Parties, and expressed regret that there were instances where amendments were approved when it was politically expedient for States to use some of the privileges, while not having to accept any of the obligations.

Proposal to designate the Mediterranean Sea, as a whole, as an emission control area for sulphur oxides and particulate matter

11.16 The Committee noted that the Technical Group had determined that the ECA for sulphur oxides and particulate matter proposed for the Mediterranean Sea satisfied the criteria set forth in section 3 of Appendix III of MARPOL Annex VI.

11.17 The Committee, having endorsed the proposal to designate the ECA for sulphur oxides and particulate matter for the Mediterranean Sea, approved the draft amendments to MARPOL Annex VI, as set out in annex 23, and requested the Secretary-General to circulate them in accordance with MARPOL Article 16(2), with a view to adoption at MEPC 79.

11.18 In this context, the Committee requested the Secretariat to carry out an editorial review, in particular of the coordinates used to designate the boundaries of the proposed emission control area in the draft amendments to MARPOL Annex VI to ensure consistency with those set out in appendix VII to MARPOL Annex VI, prior to submission to MEPC 79.

12 TECHNICAL COOPERATION ACTIVITIES FOR THE PROTECTION OF THE MARINE ENVIRONMENT

12.1 In accordance with the arrangements of the remote session, as outlined in document MEPC 78/1/1 (paragraphs 12 to 15) and its annex 3 (section 7 on agenda item 12), the Committee considered by correspondence, prior to the virtual meeting, the following documents:

- .1 MEPC 78/12 (Secretariat), providing an update on the activities implemented under IMO's Integrated Technical Cooperation Programme (ITCP) from 1 January to 31 December 2021; and
- .2 MEPC 78/12/1 (REMPEC), providing an update on activities implemented by the Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC) for the period from 1 April to 31 December 2021.

12.2 During the virtual meeting, the Committee reconfirmed the Chair's proposals in annex 3 to document MEPC 78/1/1, and noted the information provided in these documents.

13 APPLICATION OF THE COMMITTEES' METHOD OF WORK

13.1 The Committee noted that no submissions had been made under this agenda item and recalled that under agenda item 10 it had approved MSC-MEPC.1/Circ.5/Rev.3 on the *Organization and method of work of the Maritime Safety Committee and the Marine Environment Protection Committee and their subsidiary bodies* so as to include the revised checklist for considering and addressing human element issues, as prepared by HTW 8 (see paragraph 10.4).

14 WORK PROGRAMME OF THE COMMITTEE AND SUBSIDIARY BODIES

Proposals for new outputs

Proposal for a new output on the development of a practical guide on the development of local-level marine spill contingency plans to support key authorities to effectively implement the OPRC Convention

14.1 The Committee considered document MEPC 78/14 (Norway), proposing the development of a guide containing a compilation of best practices for developing local-level marine spill contingency plans to aid States, particularly local governments and key institutions, in implementing the OPRC Convention and OPRC HNS Protocol, together with the Chair's preliminary assessment of the proposal (MEPC 78/WP.3, annex).

14.2 Following discussion, the Committee agreed to include in the post-biennial agenda of the Committee an 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", with two sessions needed to complete the item, assigning the PPR Sub-Committee as the associated organ.

Proposal to expand the scope of the existing output 7.11 on Development of measures to reduce risks of use and carriage of heavy fuel oil (HFO) as fuel by ships in Arctic waters to include an amendment to the definition of HFO

14.3 The Committee considered document MEPC 78/14/1 (Iceland and Norway), proposing to expand the scope of the existing output 7.11 on Development of measures to reduce risks of use and carriage of heavy fuel oil (HFO) as fuel by ships in Arctic waters, to include an upper pour point limit HFO in regulation 43.1.2 in MARPOL Annex I, together with the Chair's preliminary assessment of the proposal (MEPC 78/WP.3, annex).

14.4 In the ensuing discussion, some delegations expressed support for the proposal to expand the scope of the existing output 7.11 to amend regulation 43.1.2 of MARPOL Annex I to include an upper pour point limit of 0°C. Some other delegations were of the view that the proposal required further detailed technical consideration that would take into account more data and studies, as the introduction of a pour point limit might affect, inter alia, the availability of distillate fuels, black carbon emissions, and might increase leakage of fuel oil in the event of a ship sinking or sustaining damage to its hull.

14.5 In this context, the observers from ISO, IBIA and IPIECA made statements, which are set out in annex 28.

14.6 Having agreed that detailed technical consideration of the proposal in document MEPC 78/14/1 was necessary, the Committee forwarded it to PPR 10 and instructed the Sub-Committee to consider the document further, with a view to advising the Committee on how best to proceed.

Proposal for a new output to amend the definition of "person" as provided in MARPOL Annex IV

14.7 The Committee recalled that MEPC 71 had considered document MEPC 71/14/3 (India) proposing a new output to amend the definition of "person" in regulation 1.8 of MARPOL Annex IV, taking into account persons other than crew and passengers.

14.8 The Committee recalled further that MEPC 71, having noted ongoing related work in MSC and the SDC Sub-Committee on the development of mandatory requirements for addressing safety standards for the carriage of more than 12 industrial personnel on board ships engaged on international voyages, had agreed to keep the proposal in abeyance until the results of MSC's work were available (MEPC 71/17, paragraph 14.11).

14.9 Having noted that MSC 105 had approved, in principle, the draft International Code of Safety for Ships Carrying Industrial Personnel (IP Code), with a view to adoption in conjunction with the associated new SOLAS chapter XV at MSC 106 (MSC 105/20, paragraph 15.7), the Committee considered the proposal contained in document MEPC 71/14/3 together with the Chair's preliminary assessment of the proposal (MEPC 78/WP.3, annex).

14.10 In this connection, the Committee recalled that the PPR Sub-Committee had been working on the existing output 1.26 on "Revision of MARPOL Annex IV and associated guidelines to introduce provisions for record-keeping and measures to confirm the lifetime performance of sewage treatment plants" and that PPR 9 had recommended amending the title of output 1.26 to "Revision of MARPOL Annex IV and associated guidelines to introduce provisions for record-keeping and measures to confirm the lifetime performance of sewage and measures to confirm the lifetime performance of sewage treatment plants; and measures to confirm the lifetime performance of sewage treatment plants; and further, on new ships, a prohibition of fitting comminuting and disinfecting systems (CDS)" (PPR 9/21, paragraph 14.7).

14.11 Following discussion, the Committee agreed to amend the title of the existing output 1.26 to "Revision of MARPOL Annex IV and associated guidelines", and that specific work to be carried out be captured in the scope of work as follows:

- .1 introduce provisions for record-keeping and measures to confirm the lifetime performance of sewage treatment plants;
- .2 consider amending the definition of "person" as provided in regulation 1 of MARPOL Annex IV, taking into account persons other than crew and passengers; and
- .3 prohibit fitting comminuting and disinfecting systems (CDS) on new ships.

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

14.12 The Committee recalled its earlier decisions with regard to outputs relevant to the PPR Sub-Committee as follows:

- .1 adding 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" (see paragraph 14.2); and
- .2 amending the title of the existing output 1.26 to "Revision of MARPOL Annex IV and associated guidelines" with the scope of the work (see paragraph 14.11).

14.13 Following consideration, the Committee approved the Sub-Committee's biennial status report and the provisional agenda for PPR 10, as set out in annexes 24 and 25, respectively.

14.14 Following a request by the observer from CLIA for clarification on how the request for expert review of the 2022 Guidelines for risk and impact assessments of the discharge water from exhaust gas cleaning systems by the GESAMP EGCS Task Team, as proposed in document MEPC 78/9/4, and other issues (see also paragraph 5.18), would be progressed, the Committee clarified that proposals on review of the Guidelines could be submitted to future sessions of the Committee. In this regard, the Committee recalled the course of action in relation to output 1.23 (Evaluation and harmonization of rules and guidance on the discharge of discharge water from EGCS into the aquatic environment, including conditions and areas) that it had agreed to during its consideration and approval of the PPR Sub-Committee's biennial status report, namely that:

- .1 the target completion year of output 1.23 was extended to 2025;
- .2 output 1.23 was not included in the provisional agenda for PPR 10; and

.3 the Committee would consider reinstating output 1.23 in the provisional agenda of a future session of the PPR Sub-Committee (i.e. after PPR 10), subject to further proposals to MEPC on part 3 (regulatory matters) and part 4 (database of substances) of the scope of work of the output by interested Member States and international organizations.

Biennial agenda of the CCC Sub-Committee and provisional agenda for CCC 8

14.15 The Committee recalled that MEPC 77 had approved the biennial agenda of the CCC Sub-Committee for the 2022-2023 biennium and the provisional agenda for CCC 8, as set out in document CCC 7/15, annexes 11 and 12.

14.16 The Committee noted that MSC 105 had approved the biennial agenda of the CCC Sub-Committee for the 2022-2023 biennium and the provisional agenda for CCC 8, as set out in document MSC 105/20, annexes 40 and 41, respectively, incorporating the following changes:

- .1 deletion of the output on "Amendments to the IMDG Code related to portable tanks with shells made of fibre-reinforced plastics (FRPs) for multimodal transportation of dangerous goods", as the work under that output had already been covered by amendments 41-22 of the IMDG Code; and
- .2 addition of two new outputs on "Development of guidelines for safety of ships using ammonia as fuel" and "Revision of the interim recommendations for carriage of liquefied hydrogen in bulk".

14.17 The Committee also noted MSC 105 had instructed CCC 8 to further consider documents A 32/12/2 and MSC 105/2/2, and matters related to the development of safety requirements to support the achievement of the decarbonization goal, in the context of its work on the development of the IGF Code and safety provisions for alternative fuels, and advise MSC on how best to proceed.

14.18 The Committee further noted that MSC 105 had agreed to an extension of the Sub-Committee's meeting time to eight days (while maintaining four-day interpretation in plenary) for two sessions starting with CCC 8 in 2022, subject to a concurrent decision by MEPC 78, followed by endorsement by the Council.

14.19 Following consideration, the Committee concurred with the decision of MSC 105 in extending the Sub-Committee's meeting time to eight days (while maintaining four-day interpretation in plenary) for two sessions starting with CCC 8 in 2022, subject to endorsement by the Council, and approved the revised biennial agenda of the CCC Sub-Committee for the 2022-2023 biennium and the revised provisional agenda for CCC 8, as set out in document MSC 105/20, annexes 40 and 41.

Biennial agenda of the III Sub-Committee and provisional agenda for III 8

14.20 The Committee, having recalled that MEPC 77 and MSC 104 had approved the biennial agenda of the III Sub-Committee for the 2022-2023 biennium and the provisional agenda for III 8, as set out in document III 7/17, annexes 9 and 10, confirmed the biennial agenda of the III Sub-Committee for the 2022-2023 biennium and the provisional agenda for III 8, as set out in document MSC 105/20, annexes 40 and 41.

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

14.21 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 26.

Items to be included in the agenda of MEPC 79

14.22 The Committee, having considered document MEPC 78/WP.4 (Secretariat) and taken into account the decisions made at this session, approved the items to be included in the agenda of MEPC 79, as set out in annex 27.

Tentative dates for MEPC 79 and MEPC 80

14.23 The Committee noted that MEPC 79 and MEPC 80 had been tentatively scheduled to take place from 12 to 16 December 2022 and from 3 to 7 July 2023, respectively.

Correspondence group

14.24 The Committee recalled that it had decided under agenda items 4 and 7 to establish the Correspondence Group on Review of the BWM Convention and the Correspondence Group on Marine Fuel Life Cycle GHG Analysis, respectively (see paragraphs 4.33 and 7.109).

Intersessional meetings

- 14.25 The Committee approved, subject to endorsement by the Council, 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 2023.

15 ANY OTHER BUSINESS

15.1 In accordance with the arrangements of the remote session, as outlined in document MEPC 78/1/1 (paragraphs 12 to 15) and its annex 3 (section 8 on agenda item 15), the Committee considered by correspondence, prior to the virtual meeting, the following documents:

- .1 MEPC 78/15 (Secretariat), providing an update on recent work carried out by the Secretariat, in cooperation with other United Nations agencies, on issues relating to the protection of the marine environment;
- .2 MEPC 78/15/1 (Secretariat), providing a preliminary list of mandatory instruments for which a consolidated version would be most beneficial, as requested by C 125;

- .3 MEPC 78/15/2 (China), proposing to update the footnotes in the MARPOL Convention and providing specific proposals for amendments to some footnotes that had not been revised or replaced properly as necessary after previous revisions;
- .4 MEPC 78/INF.9 (Liberia), providing results from a recent study assessing the quality of the washwater substances discharged into the sea by individual ships, which evaluated water samples from the inlet of the exhaust gas cleaning system and from the outlet, prior to any pre-discharge treatment;
- .5 MEPC 78/INF.26 (Austria et al.), providing information on the first edition of the European Maritime Transport Environmental Report (EMTER) developed by the European Maritime Safety Agency and the European Environment Agency, which had been released in September 2021; and
- .6 MEPC 76/13/1 (World Coatings Council), proposing that flag State Administrations' International Anti-fouling System Certificates for ships flying their flag be issued without any additional procedures for anti-fouling paints that were not required under the AFS Convention.

15.2 During the virtual meeting, the Committee reconfirmed the Chair's proposals in annex 3 to document MEPC 78/1/1, as set out in the following paragraphs 15.3 to 15.8.

Recent inter-agency activities

15.3 The Committee noted the information contained in document MEPC 78/15 (Secretariat) on recent inter-agency activities, and invited the Secretariat to continue its cooperation with other United Nations agencies on issues relating to the protection of the marine environment.

Certified true copies of consolidated texts of IMO instruments

15.4 The Committee endorsed the list of mandatory instruments under the Committee's purview for which a consolidated version would be most beneficial, set out in the annex to document MEPC 78/15/1 (Secretariat), and agreed to report this to C 127 accordingly.

Updates to the footnotes in the MARPOL Convention

15.5 The Committee requested the Secretariat to take into account the proposals in document MEPC 78/15/2 (China) when preparing the new edition of the MARPOL Convention.

Survey and certification under the AFS Convention

15.6 The Committee instructed the III Sub-Committee to consider the information and proposals in document MEPC 76/13/1 (World Coatings Council) and advise the Committee accordingly.

Study assessing washwater substances

15.7 The Committee noted the information contained in document MEPC 78/INF.9 (Liberia) on results from a recent study assessing the quality of the washwater substances discharged into the sea by individual ships.

European Maritime Transport Environmental Report

15.8 The Committee noted the information contained in document MEPC 78/INF.26 (Austria et al.) on the first edition of the European Maritime Transport Environmental Report developed by the European Maritime Safety Agency and the European Environment Agency and released in September 2021.

16 CONSIDERATION OF THE REPORT OF THE COMMITTEE

16.1 The draft report of the Committee (MEPC 78/WP.1) was prepared by the Secretariat, in consultation with the Vice-Chair, and considered by the Committee during the virtual meeting held on 10 June 2022. Subsequently, the Secretariat, in consultation with the Vice-Chair, prepared and published on IMODOCS the final draft report (MEPC 78/WP.1/Rev.1) incorporating the changes to document MEPC 78/WP.1 that had been agreed during its consideration in the virtual meeting. Thereafter, delegations wishing to comment on the final draft report were given a deadline of 23 June 2022, 23.59 (UTC+1) to do so by correspondence in accordance with paragraph 21 of the *Interim guidance to facilitate remote sessions of the Committees during the COVID-19 pandemic* (MSC-LEG-MEPC-TCC-FAL.1/Circ.1).

16.2 By the above-mentioned deadline, no comments were 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 23 June 2022, pursuant to rule 35 of the Rules of Procedure.

17 ACTION REQUESTED OF OTHER IMO ORGANS

17.1 The Counci, at its 127th session, is invited to:

- .1 consider the report of the seventy-eighth session of MEPC and, in accordance with Article 21(b) of the IMO Convention, transmit it, with any comments and recommendations, to the thirty-second session of the Assembly;
- .2 note the comments made and decisions taken on matters related to the ongoing armed conflict between the Russian Federation and Ukraine and its effects on international shipping and the marine environment (section 2);
- .3 note that the Committee adopted amendments to MARPOL Annex I and the IBC Code concerning the watertight doors; and the amendments to MARPOL Annex II, concerning the revised GESAMP Hazard Evaluation Procedure (section 3 and annexes 1 to 3);
- .4 note the action taken by the Committee on issues related to ballast water management, in particular the decision to develop a BWM Convention Review Plan (CRP) and the establishment of a Correspondence Group on Review of the BWM Convention to progress the work (section 4 and annex 4);
- .5 note the action taken by the Committee on issues related to air pollution prevention, in particular the approval of circulars MEPC.1/Circ.899 on 2022 Guidelines for risk and impact assessments of the discharge water from exhaust gas cleaning systems; and MEPC.1/Circ.900 on 2022 Guidance regarding the delivery of EGCS residues to port reception facilities (section 5 and annexes 5 to 7);

- .6 note the action taken by the Committee on issues related to the reduction of GHG emissions from ships, in particular that it reiterated its commitment to strengthen the ambition of the Initial Strategy and to continue the revision process with a view to adopting the Revised Strategy by MEPC 80; the adoption/approval of relevant guidelines supporting the implementation of the short-term GHG reduction measure; the consideration of concrete proposals for mid-term measures; the development of draft guidelines on life cycle GHG intensity of marine fuels; the progress made on how to keep the impacts on States of the short-term measure under review and the revision of the *Procedure for assessing impacts on States of candidate measures* (section 7 and annexes 8 to 17);
- .7 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 decision on the development of a goal-based requirement under MARPOL Annex V for the mandatory marking of fishing gear and the approval of the draft amendments to MARPOL Annex V to make the Garbage Record Book mandatory also for ships of 100 gross tonnage and above and less than 400 gross tonnage (section 8 and annex 18);
- .8 note the action taken by the Committee on the outcome of PPR 9, in particular the adoption of the updated guidelines concerning anti-fouling systems on ships in light of amendments to the AFS Convention introducing controls on cybutryne and the approval of draft amendments to MARPOL Annexes I, II, IV, V and VI concerning regional reception facilities in the Arctic (section 9, annexes 19 to 22);
- .9 note the action taken by the Committee on the outcome of HTW 8 concerning the approval of MSC-MEPC.1/Circ.5/Rev.3 on the *Organization and method of work of the Maritime Safety Committee and the Marine Environment Protection Committee and their subsidiary bodies*, incorporating a revised checklist for considering and addressing human element issues (paragraph 10.4);
- .10 note the action taken by the Committee on the outcome of III 7 concerning the consolidated audit summary reports under the IMO Member State Audit Scheme (paragraphs 10.7 to 10.11);
- .11 note that the Committee endorsed a proposal (MEPC 78/11) for designating the ECA for sulphur oxides and particulate matter for the Mediterranean Sea and approved the draft amendments to MARPOL Annex VI to this effect (section 11 and annex 23);
- .12 note the action taken by the Committee regarding technical cooperation activities for the protection of the marine environment (section 12);
- .13 endorse the 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", for inclusion in the post-biennial agenda of the Committee, assigning the PPR Sub-Committee as the associated organ (paragraph 14.2);

- .14 endorse 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 (paragraph 14.19);
- .15 note the status report of the outputs of MEPC for the 2022-2023 biennium and the post-biennial agenda of MEPC (paragraph 14.21 and annex 26);
- .16 note that the Committee approved the items to be included in the provisional agenda of MEPC 79 (paragraphs 14.22 and annex 27);
- .17 endorse the Committee's approval of holding of (paragraph 14.25):
 - .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 2023; and
- .18 consider the list of mandatory instruments under the remit of the Marine Environment Protection Committee for which a consolidated version would be most beneficial, as set out in the annex to document MEPC 78/15/1 (Secretariat), and take action as deemed appropriate (paragraph 15.4).
- 17.2 The Maritime Safety Committee, at its 106th session, is invited to:
 - .1 note that the Committee took a decision concurrent with that of MSC 105 in instructing the III Sub-Committee to consider the CASRs completed in 2019 and 2020 and report to the Committees the outcome of its consideration (paragraph 2.4);
 - .2 note the comments made and decisions taken by the Committee on matters related to the ongoing armed conflict between the Russian Federation and Ukraine and its effects on international shipping and the marine environment (paragraphs 2.5 to 2.15);
 - .3 note that the Committee adopted resolutions MEPC.343(78) and MEPC.345(78) on amendments to MARPOL and the IBC Code, respectively, concerning watertight doors (paragraphs 3.16, 3.17, 3.20 and 3.21 and annexes 1 and 3);
 - .4 note that in light of the outcome of MSC 105, the Committee approved draft amendments to appendix V of MARPOL Annex VI for inclusion of information on the flashpoint of fuel oil in the bunker delivery note (paragraph 5.26 and annex 7);
 - .5 note that the Committee took a decision concurrent with that of MSC 105 in approving MSC-MEPC.1/Circ.5/Rev.3 on the Organization and method of work of the Maritime Safety Committee and the Marine Environment Protection Committee and their subsidiary bodies, incorporating a revised checklist for considering and addressing human element issues (paragraph 10.4);

- .6 note that the Committee took decisions concurrent with those of MSC 105 regarding the analysis of the four CASRs under the IMO Member State Audit Scheme (IMSAS) (paragraphs 10.7 and 10.8);
- .7 note that the Committee took a decision concurrent with that of LEG 109, MSC 105 and FAL 46 in approving the updated joint FAL.2-MEPC.1-MSC.1-LEG.2 circular on the List of certificates and documents required to be carried on board ships, 2022 (paragraph 10.12); and
- .8 note that the Committee took decisions concurrent with those of MSC 105 in approving the biennial agendas of the CCC and III Sub-Committees and the provisional agendas for CCC 8 and III 8, including the extension of the CCC Sub-Committee's meeting time to eight days (while maintaining four days' interpretation) for two sessions starting with CCC 8 (paragraphs 14.15 to 14.20).
- 17.3 The Legal Committee, at its 110th session, is invited to:
 - .1 note the comments made and decisions taken by the Committee on matters related to the ongoing armed conflict between the Russian Federation and Ukraine and its effects on international shipping and the marine environment (paragraphs 2.5 to 2.15); and
 - .2 note that the Committee took a decision concurrent with that of LEG 109, MSC 105 and FAL 46 in approving the updated joint FAL.2-MEPC.1-MSC.1-LEG.2 circular on the List of certificates and documents required to be carried on board ships, 2022 (paragraph 10.12).
- 17.4 The Facilitation Committee, at its forty-seventh session, is invited to:
 - .1 note the comments made and decisions taken by the Committee on matters related to the ongoing armed conflict between the Russian Federation and Ukraine and its effects on international shipping and the marine environment (paragraphs 2.5 to 2.15); and
 - .2 note that the Committee took a decision concurrent with that of LEG 109, MSC 105 and FAL 46 in approving the updated joint FAL.2-MEPC.1-MSC.1-LEG.2 circular on the *List of certificates and documents required to be carried on board ships, 2022* (paragraph 10.12).
- 17.5 The Technical Cooperation Committee, at its seventy-second session, is invited to:
 - .1 note that the Committee invited interested Member States to use IMO's technical assistance initiatives to support developing countries with the development of a National Action Plan (NAP) in accordance with resolution MEPC.327(75) on the Encouragement of Member States to develop and submit voluntary National Action Plans, taking into account the new guide entitled National Action Plan (NAP) to address GHG emissions from ships: from decision to implementation developed by the IMO-Norway GreenVoyage 2050 Project (paragraphs 7.3 and 7.4);

- .2 note the Committee's consideration on the lessons learned exercise of the comprehensive impact assessment of the short-term GHG reduction measure and the revision of the *Procedure for assessing impacts on States of candidate measures* (paragraphs 7.111 to 7.117);
- .3 note the updated information on the voluntary financial contributions to the GHG TC-Trust Fund and that the Committee encouraged Member States and international organizations to consider making further contributions to the Fund to support the Organization's efforts in supporting developing States with the implementation of the Initial Strategy (paragraphs 7.121 to 7.124);
- .4 consider the identified areas that may need technical assistance following the analysis of the four consolidated audit summary reports (CASRs) under the IMO Member State Audit Scheme (IMSAS) and report to the Council, as appropriate (paragraph 10.9);
- .5 consider the initial analysis of the criteria for determining the appropriateness and effectiveness of the identified provisions related to port reception facilities and report to the Council, as appropriate (paragraph 10.11); and
- .6 note the action taken by the Committee regarding technical cooperation activities for the protection of the marine environment (section 12).

(The annexes to this report have been issued as document MEPC 78/17/Add.1)