INTERNATIONAL MARITIME ORGANIZATION

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MARINE ENVIRONMENT PROTECTION COMMITTEE
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Agenda item 17

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

LIST OF ANNEXES

1 INTRODUCTION – ADOPTION OF THE AGENDA

1.1 The seventy-first session of the Marine Environment Protection Committee was held at IMO Headquarters from 3 to 7 July 2017, chaired by Mr. A. Dominguez (Panama). The Vice-Chair of the Committee, Mr. H. Saito (Japan), was also present.

1.2 The session was attended by delegations from Members and Associate Members; representatives from United Nations Programmes, specialized agencies and other entities; observers from intergovernmental organizations with agreements of cooperation; and observers from non-governmental organizations in consultative status, as listed in document MEPC 71/INF.1.

1.3 The session was also attended by the Chairs of the Council, Mr. J. G. Lantz (United States), the Facilitation Committee, Mr. Y. Melenas (Russian Federation) and the governing bodies to the London Convention and Protocol, Mr. Gi-Hoon Hong (Republic of Korea).

Opening address of the Secretary-General

1.4 The Secretary-General welcomed participants and delivered his opening address, the full text of which is available at the IMO website at the following link:

http://www.imo.org/MediaCentre/SecretaryGeneral/Secretary-GeneralsSpeechesToMeetings

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

Adoption of the agenda

1.6 The Committee adopted the agenda for the session (MEPC 71/1) and, having noted the annotations thereto (MEPC 71/1/1), agreed to be guided by the provisional timetable (MEPC 71/1/1, annex 2, as revised), on the understanding that the timetable was subject to adjustments depending on the progress made each day.

Credentials

1.7 The Committee noted that the credentials of the delegations attending the session were in due and proper order.

Statements

1.8 The Committee noted general statements, listed in this paragraph in the order they were given, made by the delegations of Sweden, Cyprus, Qatar, the United Arab Emirates, Saudi Arabia, Indonesia and by the observer from IPIECA, as set out in annex 29.

2 DECISIONS OF OTHER BODIES

2.1 The Committee, having noted the decisions of MSC 97 (MEPC 71/2), C 117 (MEPC 71/2/1), LC 38/LP 11 (MEPC 71/2/2), FAL 41 (MEPC 71/2/3) and LEG 104 (MEPC 71/2/4) with regard to its work, agreed to take action as appropriate under the relevant agenda items and as indicated hereunder.

Outcome of MSC 98

2.2 The Committee noted that, owing to the close proximity of MSC 98 and MEPC 71, the general outcome of MSC 98 would be considered at the next session, however, it would be informed of the relevant outcome of MSC 98 as necessary where this was needed to progress or complete the work on certain issues at this session.

Outcome of C 117

2.3 The Committee noted, in particular, that the Council had:

.1 requested the Secretary-General to prepare a first draft of the alignment of the outputs to the new strategic framework for the sub-committees' and committees' consideration (see also paragraphs 14.35 to 14.37);

.2 endorsed the request of MEPC 70 for additional human resources in the Secretariat to develop and maintain the IMO Ship Fuel Oil Consumption Database and produce an annual report for the Committee summarizing the data collected, the status of missing data, and such other information as may be requested by the Committee; and

.3 endorsed the holding of two intersessional meetings of the Working Group on Reduction of GHG emissions from ships in 2017 and, in principle, the holding of further intersessional meetings on the matter during the next biennium.

Outcome of LC 38/LP 11

2.4 The Committee, having noted in particular the outcome of LC 38/LP 11 (MEPC 71/2/2) on the development of advice on the disposal of fibreglass vessels, invited Member Governments and international organizations to forward information that could be of assistance to the LC/LP Parties, for example, on best practices, guidance or case studies on the recycling and/or destruction of fibreglass vessels, directly to the Secretariat[1], for consideration at LC 39/LP 12 (9 to 13 October 2017).

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 MARPOL Annex VI related to the designation of the Baltic Sea and the North Sea Emission Control Areas for NO_X Tier III control and the information to be included in the bunker delivery note.

3.2 The Committee noted that the text of the aforementioned amendments had been circulated, in accordance with article 16(2)(a) of MARPOL, to all IMO Members and Parties to MARPOL by Circular Letter No.3691 of 24 November 2016.

[1] **Contact details**:
Mr. Fredrik Haag, Technical Officer, Marine Environment Division, email: fhaag@imo.org

Draft amendments to MARPOL Annex VI

3.3 The Committee recalled that MEPC 70 had considered and approved draft amendments to regulation 13 (Nitrogen oxides (NO_X)) concerning the designation of the Baltic Sea and the North Sea Emission Control Areas for NO_X Tier III control and to appendix V (information to be included in the bunker delivery note), as set out in document MEPC 71/3 (Secretariat).

3.4 The Committee had for its consideration documents MEPC 71/3/1 (IMarEST) and MEPC 71/3/2 (IBIA), commenting on the draft amendments.

3.5 Having considered the proposals set out in document MEPC 71/3/1, the Committee agreed to:

.1 restructure regulations 13.5 and 13.6 so that NO_X Tier III ECAs designated in the future would simply be added to existing listings and there would be no need to renumber paragraphs or insert additional text in the regulations;

.2 replace the word "ships" with the words "a newly constructed ship/a ship" in the new paragraph 5.5 of regulation 13; and

.3 use the term "NO_X Tier III Emission Control Area" generally in regulation 13 in order to describe those particular emission control areas, to provide consistency.

3.6 The Committee noted that similar changes could be introduced in regulation 14.3, for purposes of consistency, but that no action could be taken at the present time, as this regulation was not part of the amendments under review.

3.7 The Committee considered document MEPC 71/3/2, which proposed substantive modifications to the amendments to appendix V of MARPOL Annex VI concerning the information to be included in the bunker delivery note, to resolve issues anticipated to arise in 2020. Whilst some delegations supported aspects of the suggested modifications, the Committee recalled that a very similar proposal had already been considered at MEPC 70 and had not been agreed at that session. As a consequence, the Committee did not agree to the proposals contained in the document.

3.8 Having agreed to modifications to the draft amendments as set out in paragraph 3.5 above, subject to editorial amendments, if any, the Committee agreed that the entry-into-force date of the above-mentioned amendments should be 1 January 2019.

Establishment of a Drafting Group

3.9 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 the final text of the draft amendments to MARPOL Annex VI, together with the requisite MEPC resolution for their adoption.

Report of the Drafting Group

3.10 The Committee approved the report of the Group (MEPC 71/WP.6) in general and took action as indicated hereunder.

Draft amendments to appendix V of MARPOL Annex VI

3.11 The Committee noted a request by the observer from IBIA for clarification on two points related to the amendments to appendix V of MARPOL Annex VI regarding the information to be included in the bunker delivery note, as follows:

.1 whether the text at the end that stated that "the declaration shall be completed by the fuel oil supplier's representative by marking appropriate tick box(es) with a cross (x)" meant that the regulation required a tick box system in the bunker delivery note; and

.2 whether the two specific sub-conditions (.1 and .2) under the third tick box represented additional information that would be required to be included in the bunker delivery note.

3.12 Further to this request, the Committee clarified that the two sub-points were to be taken as written to further qualify the tick box, but not as additional information requirements, as there were no tick boxes against them; and noted that the only information to be included in the third tick box area was the sulphur value that the purchaser had specified, with no need for validation of that value which would exist on the ship. In this regard, the Committee also noted the view of the Group that the amendments to appendix V of MARPOL Annex VI were not intended to be used as a template of the declaration.

Draft amendments to regulation 13 of MARPOL Annex VI

3.13 The Committee noted that, in reviewing the proposed amendments, the Group had noted that the text within other parts of regulation 13 of MARPOL Annex VI would need to be harmonized with the text of the new proposed amendments and, having noted that these changes were editorial in nature, had included them as part of the amendments.

3.14 In this regard, the Committee, having noted that paragraph 5.3 of regulation 13 was not yet in force[2] and therefore could not be included in the amendments to be adopted at this session, agreed in principle to a draft amendment as follows and requested the Secretariat to incorporate it in future amendments to MARPOL Annex VI:

"**Regulation 13**
Nitrogen oxides (NO_X)

In paragraph 5.3, the words "an emission control area designated under paragraph 6 of this regulation" are replaced by the words "a NO_X Tier III emission control area"."

3.15 The Committee also noted the view of the Group that rather than using cross references to Annexes I and V of MARPOL, using the actual text of the definitions of the Baltic Sea and North Sea areas would be preferable and that this issue, concerning regulations 13.6 and 14.3, should be addressed in the future.

Adoption of amendments to MARPOL Annex VI

3.16 The Committee, having considered the final text of the draft amendments to MARPOL Annex VI related to the designation of the Baltic Sea and the North Sea ECAs for NO_X Tier III control and to the information to be included in the bunker delivery note prepared by the Drafting Group (MEPC 71/WP.6, annex 1), adopted the amendments by resolution MEPC.286(71), as set out in annex 1.

[2] Will enter into force on 1 September 2017.

3.17 In adopting resolution MEPC.286(71), the Committee determined, in accordance with article 16(2)(f)(iii) of MARPOL, that the adopted amendments to MARPOL Annex VI shall be deemed to have been accepted on 1 July 2018 (unless, prior to that date, objections were 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 2019, in accordance with article 16(2)(g)(ii) of the Convention.

Instructions to the Secretariat

3.18 In adopting the aforementioned amendments, the Committee authorized the Secretariat, when preparing the authentic texts, to make any editorial corrections that might 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

General

4.1 The Committee, having recalled that the BWM Convention would enter into force on 8 September 2017, noted that the current number of Contracting Governments was 60, representing 68.46% of the world's merchant fleet tonnage.

Consideration and approval of ballast water management systems

4.2 The Committee noted that the thirty-fourth meeting of the GESAMP-Ballast Water Working Group (GESAMP-BWWG 34) was held from 5 to 9 December 2016 at IMO Headquarters, chaired by Mr. J. Linders, and that its report had been issued as document MEPC 71/4/3. During the meeting, GESAMP-BWWG 34 had reviewed three proposals for approval of ballast water management systems (BWMS) that made use of Active Substances, submitted by the Netherlands, Norway and the Republic of Korea.

Basic Approval

4.3 The Committee approved the report of GESAMP-BWWG 34 (MEPC 71/4/3) in general and, having considered the recommendation contained in annex 4 of the report, agreed to grant Basic Approval to the MICROFADE II Ballast Water Management System, proposed by the Netherlands (MEPC 71/4), and the Envirocleanse inTank™ BWTS, proposed by Norway (MEPC 71/4/2); and invited the Administrations of the Netherlands and Norway to take into account all the recommendations made in the report (MEPC 71/4/3, annexes 4 and 6) during the further development of the systems.

Final Approval

4.4 The Committee, having considered the recommendation contained in annex 5 of the report, agreed to grant Final Approval to the ECS-HYBRID™ System, proposed by the Republic of Korea (MEPC 71/4/1); and invited the Administration of the Republic of Korea to verify that all recommendations contained in the report (MEPC 71/4/3, annex 5) were fully addressed prior to the issuance of the Type Approval Certificate.

Application of BWMS approval provisions

4.5 The Committee agreed that applicants and the GESAMP-BWWG should specify, in the future, whether the provisions of the *Guidelines for approval of ballast water management systems* (G8) (resolution MEPC.174(58)), the 2016 Guidelines (G8) (resolution MEPC.279(70)), or the *Code for approval of ballast water management systems* had been used for BWMS submitted for evaluation by the GESAMP-BWWG and approval by the Committee.

Information on corrosion tests

4.6 Having considered the relevant recommendations of GESAMP-BWWG 34 (MEPC 71/4/3, paragraphs 4.2.1 to 4.2.3), the Committee urged Administrations to ensure that the required information on corrosion tests was included in submitted applications for Final Approval, in accordance with the *Methodology for information gathering and conduct of work of the GESAMP-BWWG* (BWM.2/Circ.13, as revised).

Future meetings of the GESAMP-BWWG

4.7 The Committee noted that the thirty-fifth meeting of the GESAMP-BWWG had been scheduled to take place from 6 to 10 November 2017, and that Member Governments had been invited to submit their proposals for approval (application dossiers) and the non-confidential description of their BWMS to MEPC 72 not later than 22 September 2017, as specified in circular BWM.2/Circ.60.

4.8 The Committee further noted that, recognizing the possibility that more than four proposals may be submitted for review by the Group and subsequent approval by MEPC 72, the GESAMP-BWWG had expressed its availability to have an additional meeting (GESAMP-BWWG 36), tentatively scheduled for December 2017, to accommodate as many proposals as possible, provided that all the necessary conditions for organizing such a meeting were met. Any proposal for approval not reviewed at the thirty-fifth meeting and the additional meeting, owing to time constraints, would be reviewed at the earliest meeting of the Group after MEPC 72 and reported to MEPC 73 (MEPC 71/4/3, section 3).

Type approved BWMS

4.9 The Committee noted information regarding the latest type-approved BWMS provided in the following documents:

.1 MEPC 71/INF.4 (Netherlands) on the type approval of the Damen InvaSave 300 Ballast Water Management system;

.2 MEPC 71/INF.12 (Singapore) on the type approval of the Semb-Eco LUV 500 & Semb-Eco LUV 1500 Ballast Water Management system;

.3 MEPC 71/INF.26 (Japan) on the type approval of the KURITA BWMS Ballast Water Management system; and

.4 MEPC 71/INF.27 (Japan) on the type approval of the ATPS-BLUE$_{sys}$ Ballast Water Management system,

and thanked the delegations of Japan, the Netherlands and Singapore for the information provided.

Organizational arrangements related to the evaluation and approval of BWMS

4.10 The Committee noted that the Eighth Stocktaking Workshop on the activity of the GESAMP-BWWG had been held at IMO Headquarters from 6 to 10 February 2017, chaired by Mr. J. Linders, and that its outcome had been circulated in document MEPC 71/4/7, with the draft revised *Methodology for information gathering and conduct of work of the GESAMP-BWWG* set out in document MEPC 71/4/7/Add.1.

4.11 Having noted the outcome of the Stocktaking Workshop, the Committee agreed to the proposed procedure for submission of new data on fresh water testing of BWMS with Final Approval (MEPC 71/4/7, annex 2), to be incorporated into the draft revised Methodology of the GESAMP BWWG (MEPC 71/4/7/Add.1); and noted the Group's intention to immediately start applying the proposed procedure.

4.12 The Committee, having recalled document MEPC 62/INF.40 on budgetary and expenditure data for the GESAMP-BWWG, and having noted the time and cost implications to the Group and the Secretariat resulting from submissions of new data on fresh water testing of BWMS with Final Approval, agreed that the fee for such submissions should be $20,000 and requested the Secretariat to specify this amount in future BWM.2 circulars inviting such submissions.

4.13 The Committee noted the conclusion of the Stocktaking Workshop with regard to additives used to achieve requirements for test water challenge conditions, and invited test facilities to consider the matter as appropriate (MEPC 71/4/7, paragraphs 23 and 59.2).

4.14 The Committee noted the recommendation of the GESAMP-BWWG on the need to review Procedure (G9) and make it mandatory, as a consequence of the review and decision to make Guidelines (G8) mandatory. In this context, the Committee instructed the Ballast Water Review Group (BWRG) to consider the consequences of a mandatory Procedure (G9) and the possible need to gain experience with the *Code for approval of ballast water management systems* before a decision on the matter was made.

4.15 The Committee noted the recommendation of the Stocktaking Workshop to request applicants to provide information on measurements of hydrogen gas in relation to the sufficient capacity of gas separation (MEPC 71/4/7, paragraphs 47 and 59.6).

4.16 The Committee instructed the BWRG to consider the action requested in paragraphs 59.3 to 59.5 of document MEPC 71/4/7, as well as the draft revised *Methodology for information gathering and conduct of work of the GESAMP BWWG* (MEPC 71/4/7/Add.1), and to advise the Committee on action to be taken, as appropriate.

4.17 The Committee noted documents MEPC 71/INF.5 and MEPC 71/INF.6 (Republic of Korea) containing information regarding results of a study on the optimization of disinfection by-product analysis methods for Basic and Final Approval of BWMS that make use of Active Substances in accordance with Procedure (G9); and results of a comparability study on additives which are mainly used by test facilities around the world for the preparation of test water, respectively.

Proposed amendments to regulation B-3 of the BWM Convention

4.18 The Committee recalled that MEPC 69 had approved draft amendments to regulation B-3 of the BWM Convention and a draft MEPC resolution on determination of the date referred to in the regulation, and had requested the Secretariat to keep the draft amendments in abeyance for circulation immediately upon entry into force of the Convention.

4.19 The Committee further recalled that MEPC 70 had considered two proposals for further amendments to regulation B-3 and had agreed to:

.1 maintain the decision of MEPC 69 on the approved amendments to regulation B-3 for circulation upon entry into force of the BWM Convention;

.2 include draft alternate amendments to regulation B-3 and an associated draft MEPC resolution, which supported further amendments to the regulation, as annex 4 to the report (MEPC 70/18/Add.1); and

.3 invite submissions with a view to developing a compromise proposal and revisit the issue at MEPC 71 with a view to making a final decision before the date for circulation of the draft amendments to regulation B-3, i.e. 8 September 2017.

4.20 In this regard, the Committee considered the following documents:

.1 MEPC 71/4/12 (Brazil et al.) containing a compromise proposal for the amendment of regulation B-3 of the BWM Convention;

.2 MEPC 71/4/17 (China) commenting on the draft alternate amendments to regulation B-3 developed at MEPC 70. In this regard, the Committee noted that paragraph 2 of the document contained an editorial error where the year 2017 should instead be 2019; and

.3 MEPC 71/4/28 (Japan) and MEPC 71/4/30 (Greece) commenting on the compromise proposal in document MEPC 71/4/12.

4.21 The Committee agreed that the compromise proposal in document MEPC 71/4/12 would form the basis for the amendments to regulation B-3. Following discussion, the Committee also agreed to the proposal in document MEPC 71/4/28 that ships to which the IOPP renewal survey did not apply shall conduct Ballast Water Management that at least met the standard described in regulation D-2 from the date decided by the Administration, but not later than 8 September 2024.

4.22 Having agreed to additional minor modifications to the compromise proposal, the Committee approved the draft amendments to regulation B-3 of the BWM Convention, as set out in annex 2, and a draft MEPC resolution on *Determination of the date referred to in regulation B-3, as amended, of the BWM Convention,* as set out in annex 3, and requested the Secretary-General to circulate the draft amendments immediately upon entry into force of the Convention, with a view to adoption at MEPC 72, together with the aforementioned MEPC resolution.

4.23 In this context, the Committee confirmed that the "renewal survey" in paragraph 10.1.2 of the approved draft amendments to regulation B-3 also referred to the renewal survey for the ship associated with the International Oil Pollution Prevention Certificate pursuant to MARPOL Annex I, although carried out prior to entry into force of the BWM Convention.

4.24 Taking into consideration the time frame for the draft amendments to regulation B-3 to enter into force, the Committee agreed on the need for a resolution on implementation of the BWM Convention with a view to facilitating the smooth and uniform implementation of the approved amendments to regulation B-3. Having considered a relevant draft resolution prepared by the Secretariat (MEPC 71/WP.11/Rev.1), the Committee adopted resolution MEPC.287(71) on *Implementation of the BWM Convention,* as set out in annex 4.

4.25 The Committee invited A 30 to note the amendment to regulation B-3 and the adoption of the resolution on *Implementation of the BWM Convention*, and consequently to revoke resolution A.1088(28) on the *Application of the International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004,* which had been superseded by the aforementioned resolution.

4.26 In this connection, the Committee also considered documents MEPC 71/4/19 (INTERCARGO, InterManager) and MEPC 71/INF.20 (INTERCARGO) on challenges faced by bulk carrier owners and operators; and, having noted that the proposal in document MEPC 71/4/19 related to operational matters and interpreting regulations D-1 and D-2 of the BWM Convention, rather than the implementation timeline set out in regulation B-3, did not support the proposal to amend regulation B-3 in this regard.

Code for approval of ballast water management systems

4.27 The Committee recalled that MEPC 70 had adopted the *2016 Guidelines for approval of ballast water management systems* (G8) (resolution MEPC.279(70)) and agreed that they should be made mandatory after the entry into force of the BWM Convention and renamed as "Code for approval of ballast water management systems" (BWMS Code), taking into account resolution A.911(22) on *Uniform wording for referencing IMO instruments*.

4.28 The Committee also recalled that MEPC 70 had requested the Secretariat to prepare, for consideration at this session, any consequential amendments to Guidelines (G8) and draft amendments to the BWM Convention to reflect the future mandatory status of the Code.

4.29 In this regard, the Committee considered documents MEPC 71/4/5 (Secretariat), containing the draft BWMS Code and associated draft amendments to the BWM Convention to make the Code mandatory, and MEPC 71/4/6 (Secretariat) containing consequential amendments to the *Guidance on scaling of ballast water management systems* (BWM.2/Circ.33) and the *Guidance for Administrations on the type approval process for ballast water management systems in accordance with Guidelines (G8)* (BWM.2/Circ.43).

4.30 Following discussion, the Committee instructed the BWRG to review and finalize the draft BWMS Code and the associated draft amendments to regulations A-1 and D-3 of the BWM Convention, also taking into account a proposal to reflect the application dates of the Guidelines (G8) and the Code in regulation D-3.1. The Committee emphasized that the intention was to ensure that the mandatory nature of the Code was reflected in an appropriate manner, but not to reopen discussions related to the substance of the Code.

4.31 The Committee approved in principle the revised *Guidance on scaling of ballast water management systems* (BWM.2/Circ.33) and *Guidance for Administrations on the type approval process for ballast water management systems in accordance with Guidelines (G8)* (BWM.2/Circ.43), to be kept in abeyance for final approval at MEPC 72 in conjunction with the adoption of the BWMS Code. In this regard, the Committee requested the Secretariat to correct any editorials in the guidances and invited submissions on any proposed changes of a substantial nature to MEPC 72, for consideration before final approval.

Contingency measures

4.32 The Committee recalled that MEPC 70 had invited submissions with draft text for guidance on contingency measures under the BWM Convention, taking into consideration the outline and the relevant topics set out in annex 2 of document MEPC 70/WP.10, with a view to finalizing the guidance at this session.

4.33 In this connection, the Committee considered the following documents:

.1 MEPC 71/4/13 (Netherlands) on a port-based solution for contingency planning for ballast water management;

.2 MEPC 71/4/21 (Republic of Korea) containing draft guidance on using ballast water exchange with water treated by a BWMS as a contingency measure;

.3 MEPC 71/4/25 and MEPC 71/4/4/26 (India) containing draft guidance on contingency measures; and

.4 MEPC 71/4/29 (Japan) commenting on documents MEPC 71/4/13, MEPC 71/4/21 and MEPC 71/4/25,

and noted the information contained in documents MEPC 71/INF.15 (Denmark) on a containerized mobile treatment unit for ballast water and MEPC 71/INF.30 (IMarEST) on experience with contingency measures, effectiveness and framework for implementation.

4.34 Following discussion, the Committee instructed the BWRG to finalize guidance on contingency measures, using the proposal in document MEPC 71/4/29 as the basis and taking also into consideration documents MEPC 71/4/13, MEPC 71/4/25, MEPC 71/4/26, MEPC 71/INF.15 and MEPC 71/INF.30 and considering any consequential amendments to the *Guidelines for ballast water management and development of ballast water management plans* (G4), as appropriate.

4.35 Furthermore, the Committee agreed to refer document MEPC 71/4/21 to PPR 5 for further consideration.

Ballast water exchange

4.36 The Committee, having noted that PPR 4 had considered a proposed unified interpretation for implementing regulation B-4 (Ballast water exchange) of the BWM Convention, also noted that unified interpretations to the Convention could only be approved once it had entered into force.

4.37 The Committee further noted that PPR 4 had invited refined proposals for a unified interpretation of regulation B-4 to its next session for further consideration, with a view to its approval by MEPC 72, but that views had been expressed at PPR 4 that, considering the urgency of the matter, the development and approval of a BWM circular at MEPC 71 would be more appropriate than a unified interpretation, which could not be approved before entry into force of the Convention.

4.38 In this connection, the Committee considered the following documents:

.1 MEPC 71/4/16 (France) proposing guidance on implementation of regulation B-4 for every situation where a ship cannot carry out ballast water exchange in compliance with regulation D-1 of the BWM Convention;

.2 MEPC 71/4/20 (Republic of Korea) proposing guidance on the application of the BWM Convention for ships operating solely in areas where ballast water exchange is not possible; and

.3 MEPC 71/4/27 (Liberia et al.) containing a draft BWM circular on the application of the BWM Convention to ships operating in sea areas where ballast water exchange in accordance with regulations B-4.1 and D-1 is not possible.

4.39 Following discussion, the Committee instructed the BWRG to finalize guidance on application of the BWM Convention to ships operating in sea areas where ballast water exchange in accordance with regulation B-4 is not possible, using document MEPC 71/4/27 as the basis and, taking also into account documents MEPC 71/4/16 and MEPC 71/4/20.

Survey and certification

4.40 The Committee considered document MEPC 71/4/11 (Secretariat), setting out a way forward regarding the *Interim Survey Guidelines for the purpose of the BWM Convention under the Harmonized System of Survey and Certification* (BWM.2/Circ.7), which FSI 14 had agreed to keep in abeyance until the BWM Convention entered into force.

4.41 The Committee agreed to instruct III 4 to incorporate the aforementioned Interim Survey Guidelines in the draft amended 2015 HSSC Guidelines, with a view to submission to A 30 for adoption. In addition, the Committee instructed III 4 to introduce provisions in the HSSC Guidelines for validating the compliance of individual BWMS with regulation D-2 of the BWM Convention in conjunction with their commissioning, as agreed by MEPC 70.

4.42 The Committee considered documents MEPC 71/4/15 (China) and MEPC 71/4/22 (Republic of Korea), both proposing amendments to section E of the BWM Convention related to endorsements of additional surveys on the International Ballast Water Management Certificate and, following discussion, instructed the BWRG to finalize the amendments to section E of the Convention, using the text set out in annex 1 of document MEPC 71/4/15 as the basis.

4.43 Furthermore, having considered document MEPC 71/4/18 (IACS) containing a draft unified interpretation on how the International Ballast Water Management Certificate should be completed, the Committee instructed the BWRG to finalize the unified interpretation, for approval in principle by the Committee, with a view to keeping it in abeyance for final approval at MEPC 72, when the Convention would have entered into force.

Proposed amendments to guidelines/guidance regarding the BWM Convention

Guidelines for ballast water exchange (G6)

4.44 The Committee recalled that MEPC 70 had agreed to amend the *Guidelines for ballast water exchange* (G6) to incorporate the ballast water reporting form set out in appendix 1 of the *Guidelines for the control and management of ships' ballast water to minimize the transfer of harmful aquatic organisms and pathogens* (resolution A.868(20)) as an appendix to the Guidelines (G6); and had requested the Secretariat to prepare draft revised Guidelines (G6), together with an associated draft MEPC resolution, for consideration and adoption at this session.

4.45 Having considered document MEPC 71/4/4 (Secretariat), the Committee instructed the BWRG to finalize the draft revised Guidelines (G6) and the associated MEPC resolution for adoption by the Committee.

4.46 In this regard, a proposal was made that the Technical Cooperation Committee (TCC) should consider the need for crew training related to the Guidelines (G6). The Committee noted that the matter might be considered by the HTW Sub-Committee, if necessary, subject to relevant proposals being submitted to the Sub-Committee on the matter.

Ballast water management for ships operating exclusively in a specified area

4.47 The Committee recalled that MEPC 70, having considered a proposal for alternative criteria for ballast water management for ships operating exclusively in a specified area when engaged on international voyages for periodic dry-docking repair or maintenance, had endorsed the view of the BWRG that additional guidance was not needed as the matter had already been covered by the *Guidance on entry or re-entry of ships into exclusive operation within waters under the jurisdiction of a single Party* (BWM.2/Circ.52).

4.48 In this regard, the Committee considered document MEPC 71/4/23 (Brazil) proposing amendments to the aforementioned Guidance. Having discussed the matter and noted comments, inter alia, on the need to introduce a connection to exemptions under regulation A-4 of the BWM Convention in the Guidance, the Committee instructed the BWRG to finalize the amendments, using the text set out in the annex to the document.

Guidelines (G7) and same risk area concept

4.49 The Committee recalled that MEPC 70 had endorsed the view of the BWRG that the same risk area (SRA) concept was in line with the *Guidelines for risk assessment under regulation A-4 of the BWM Convention* (G7); that no further guidance on the matter was necessary; and that Administrations might grant exemptions in accordance with regulation A-4 based on the SRA concept, subject to consultation and agreement between States that might be affected by such exemptions. The Committee also recalled that in this regard MEPC 70 had invited proposals for minor amendments to Guidelines (G7), in order to better clarify the relationship between the Guidelines and the SRA concept, to this session.

4.50 Having considered document MEPC 71/4/24 (Belgium et al.), proposing amendments to Guidelines (G7) to introduce the SRA concept, the Committee instructed the BWRG, if time allowed, to finalize the revised Guidelines (G7) as well as the associated MEPC resolution, taking into account the text set out in the annex to the document and comments made in plenary, inter alia, on the definition of SRA and how risk assessments were to be conducted.

4.51 The Committee also noted document MEPC 71/INF.32 (IUCN) concerning the SRA concept based on the conditions in the North Sea.

Outcome of PPR 4

Guidance on methodologies that may be used for enumerating viable organisms

4.52 The Committee noted that PPR 4 had agreed to a draft BWM circular on *Guidance on methodologies that may be used for enumerating viable organisms for type approval of* B*allast* W*ater* M*anagement systems*, for approval at this session.

4.53 Having considered document MEPC 71/4/14 (Netherlands), suggesting to include two additional methodologies in the Guidance, the Committee did not agree with the proposal as it considered that more information was needed on the details and validations of these methodologies.

4.54 Consequently, the Committee approved BWM.2/Circ.61 on *Guidance on methodologies that may be used for enumerating viable organisms for type approval of ballast water management systems* (PPR 4/21, annex 4). The Committee also agreed to refer the proposal in document MEPC 71/4/14 (see paragraph 4.53) to PPR 5 for further consideration.

System Design Limitations

4.55 The Committee noted that the term System Design Limitations (SDL) was introduced in the 2016 Guidelines (G8) and recalled that MEPC 70 had instructed PPR 4 to consider options for a matrix on SDL and the need to develop separate guidance on the matter for use in conjunction with the 2016 Guidelines (G8).

4.56 In this regard, the Committee noted that PPR 4 had recognized general support for the need to develop guidance on SDL, although not necessarily in the form of a matrix; had agreed that more information was needed; and consequently had invited further proposals on the matter to a future session of the Sub-Committee.

4.57 The Committee agreed to refer document MEPC 71/4/10 (Canada et al.), proposing draft guidance on SDL and self-monitoring of BWMS, to PPR 5 for finalization of the guidance, with a view to approval at MEPC 72.

Manual on Ballast Water Management – How to do it

4.58 The Committee noted that PPR 4 had finalized the Manual on *Ballast Water Management – How to do it*, with the exception of sections 12.2.3 (Experience-building phase and trial period for sampling and analysis) and 17.2 (Response – contingency measures), for finalization by the BWRG at this session, and chapters 5 and 6 concerning legal aspects, for review by the Secretariat.

4.59 The Committee considered document MEPC 71/4/8 (Secretariat) containing alternative text for chapters 5 and 6 and a proposal to reinstate the original chapter 4 (Jurisdiction) of the second draft of the Manual (PPR 3/7).

4.60 Following discussion, the Committee:

.1 agreed to replace chapters 5 and 6 of the Manual with the alternative text set out in document MEPC 71/4/8 and to reinstate chapter 4 from document PPR 3/7; and

.2 instructed the BWRG to finalize sections 12.2.3 and 17.2 of the draft Manual (PPR 4/21, annex 5).

Experience-building phase

4.61 The Committee, having recalled that MEPC 70 had established a Correspondence Group under the coordination of Canada to further develop the experience-building phase associated with the BWM Convention, considered the report of the Correspondence Group (MEPC 71/4/9, submitted by Canada), together with document MEPC 71/4/31 (Finland) commenting on the report.

4.62 Following discussion, the Committee instructed the BWRG to:

.1 consider the matters identified for further discussion in paragraphs 26, 36.3, 37 and 50 of the report for advice to the Committee;

.2 consider the draft resolution on the experience-building phase associated with the BWM Convention set out in annex 1 of the report, considering also the budgetary consequences of the envisaged role for the Secretariat that may require approval by the Council; and

.3 finalize the draft data gathering and analysis plan for the ballast water experience-building phase set out in annex 2 of the report, for approval by the Committee.

4.63 The Committee noted that the Correspondence Group had developed text for possible inclusion in the Manual on *Ballast Water Management – How to do it*, however, taking into account the urgent need to finalize the Manual at this session, concluded that the matter could be revisited in the future, when the experience-building phase had been further developed.

4.64 The Committee considered the proposal by the Correspondence Group to invite Member States and other stakeholders to provide financial contributions in order to enable the Secretariat to support the data gathering and analysis activities associated with the experience-building phase, but agreed that consideration of the budgetary implications was necessary before deciding on the matter.

4.65 The Committee further instructed the BWRG to consider the proposal to keep the data gathering and analysis plan for the ballast water experience-building phase open for revision based on experience gained during the experience-building phase.

Information on other matters related to ballast water management

4.66 The Committee noted the information contained in the following documents:

.1 MEPC 71/INF.9 (China), on a new technology of BWMS for economical and practical compliance with the BWM Convention;

.2 MEPC 71/INF.10 (China), on a study on Persistent Organic Pollutants in ballast water tank sediments;

.3 MEPC 71/INF.11 (China), on a study on heavy metals in ballast water tank sediments;

.4 MEPC 71/INF.17 (China), containing information on the development of an indicative device to check the compliance of ships with regulation D-2 of the BWM Convention;

.5 MEPC 71/INF.18 (China), on a study on the implementation of the ballast water performance standard described in regulation D-2 of the BWM Convention; and

.6 MEPC 71/INF.25 (Denmark), on the development of a versatile methodology using Motility and Fluorescence Assays (MFA) to count viable organisms.

Issuance of certificates

4.67 In light of the imminent entry into force of the BWM Convention, the Committee, having recalled BWM.2/Circ.40 on *Issuance of Ballast Water Management Certificates prior to entry into force of the BWM Convention and Ballast Water Management Plans approved according to resolution A.868(20),* reaffirmed the provisions of the circular and invited Member Governments, in their capacities both as flag and port States, to apply it so as to facilitate the fair and consistent implementation of the Convention upon its entry into force.

Establishment of the Ballast Water Review Group

4.68 The Committee established the BWRG and instructed it, taking into consideration the comments and decisions made in plenary, to:

.1 consider the action requested in paragraphs 59.3 to 59.5 of the report of GESAMP-BWWG STW 8 (MEPC 71/4/7 and Add.1) and advise the Committee on action to be taken, as appropriate;

.2 review and finalize the draft *Code for approval of ballast water management systems* and the draft amendments to regulations A-1 and D-3 of the BWM Convention using document MEPC 71/4/5;

.3 finalize guidance on contingency measures, using the proposal in document MEPC 71/4/29 as the basis, taking also into account documents MEPC 71/4/13, MEPC 71/4/25, MEPC 71/4/26, MEPC 71/INF.15 and MEPC 71/INF.30 and considering any consequential amendments to Guidelines (G4) as appropriate;

.4 finalize guidance on application of the BWM Convention to ships operating in sea areas where ballast water exchange in accordance with regulation B-4 was not possible using document MEPC 71/4/27 as the basis, taking also into account documents MEPC 71/4/16 and MEPC 71/4/20;

.5 finalize the proposed amendments to section E of the BWM Convention using the text set out in annex 1 of document MEPC 71/4/15 as the basis;

.6 finalize the unified interpretation on how to complete the International Ballast Water Management Certificate proposed in document MEPC 71/4/18;

.7 finalize the revised Guidelines for ballast water exchange (G6) using the text set out in the annex of document MEPC 71/4/4;

.8 finalize the amendments to the *Guidance on entry or re-entry of ships into exclusive operation within waters under the jurisdiction of a single Party* (BWM.2/Circ.52), using the text set out in the annex of document MEPC 71/4/23;

.9 finalize the revised *Guidelines for risk assessment under regulation A-4 of the BWM Convention* (G7), using the text set out in the annex of document MEPC 71/4/24;

.10 finalize sections 12.2.3 and 17.2 of the draft manual *Ballast Water Management – How to do it* (PPR 4/21, annex 5); and

.11 consider the report of the Correspondence Group on the experience-building phase associated with the BWM Convention and advise the Committee as appropriate.

Report of the Ballast Water Review Group

4.69 Having considered the report of the BWRG (MEPC 71/WP.9), the Committee approved it in general and took action as outlined hereunder.

Organizational arrangements related to the evaluation and approval of BWMS

BWMS using drinking water

4.70 The Committee endorsed the recommendation of the Eighth Stocktaking Workshop on the activity of the GESAMP-BWWG (MEPC 71/4/7, paragraph 26) that in all cases where ballast water management involved the addition of an Active Substance to drinking water on board, there should be a submission to the Group for approval under the *Procedure for approval of ballast water management systems that make use of Active Substances* (G9). This did not exclude the possibility that the Group in such cases might come to the conclusion that a Final Approval submission was not necessary, similarly to the case of the Van Oord BWMS (MEPC 65/2/9, annex 6).

Methodology of the GESAMP-BWWG

4.71 The Committee approved BWM.2/Circ.13/Rev.4 on *Methodology for information gathering and conduct of work of the GESAMP-BWWG*, superseding BWM.2/Circ.13/Rev.3.

4.72 The Committee agreed that the revised Methodology should be applied to all submissions for Basic Approval to MEPC 74 and onwards, and subsequent submissions for Final Approval of those systems; and encouraged proponents to always make use of the most recent version of the Methodology, at their earliest opportunity.

Procedure (G9)

4.73 The Committee requested the GESAMP-BWWG, at its next Stocktaking Workshop, or if time allowed at its next regular meeting, to specify what amendments it recommended to Procedure (G9) and its possible mandatory nature as a consequence of the review of Guidelines (G8), with a view to decide on the possible future need to review Procedure (G9) following consideration of such recommendations.

Code for approval of ballast water management systems

4.74 The Committee approved:

.1 the draft *Code for approval of ballast water management systems* (BWMS Code) and an associated draft MEPC resolution, as set out in annex 5, with a view to adoption at MEPC 72 in conjunction with the adoption of the associated amendments to the BWM Convention; and

.2 related draft amendments to regulations A-1 and D-3 of the BWM Convention making the Code mandatory, as set out in annex 6, and requested the Secretariat to keep the draft amendments in abeyance for circulation by the Secretary-General immediately upon entry into force of the Convention.

4.75 The Committee agreed to consider, at MEPC 72, the possible reflection of the application dates of the Guidelines (G8), the 2016 Guidelines (G8), and the BWMS Code in regulation D-3 of the BWM Convention or in the body of the Code itself, rather than in the MEPC resolution associated with the Code; and invited proposals on the matter to MEPC 72 for consideration in conjunction with the adoption of the BWMS Code and the related draft amendments to the Convention.

Contingency measures

4.76 The Committee approved BWM.2/Circ.62 on *Guidance on contingency measures under the BWM Convention*, having noted the agreement of the BWRG that the Guidelines (G4) should be reviewed as a part of the experience-building phase associated with the BWM Convention.

Ballast water exchange

4.77 The Committee approved BWM.2/Circ.63 on *Application of the BWM Convention to ships operating in sea areas where Ballast Water Exchange in accordance with regulations B-4.1 and D-1 is not possible*.

4.78 The delegation of Ireland proposed that the cover note of the circular should specify that the guidance would not relieve ships or Parties from the obligations of the BWM Convention, however, the Committee did not see the need for such text as conventions prevail over non-mandatory guidance in any case. Consequently, the delegation stated that it could not agree to the approval of the draft guidance at this time.

Survey and certification

4.79 The Committee approved draft amendments to regulations E-1.1.5, E-5.8 and E-5.9.1 of the BWM Convention, as set out in annex 7, and requested the Secretariat to keep the amendments in abeyance for circulation by the Secretary-General immediately upon entry into force of the Convention.

4.80 The Committee approved, in principle, a unified interpretation of Appendix I (Form of the International Ballast Water Management Certificate) of the BWM Convention, as set out in annex 8, to be kept in abeyance for final approval at MEPC 72, when the Convention had entered into force.

Guidelines and recommendations

Guidelines for ballast water exchange (G6)

4.81 The Committee adopted resolution MEPC.288(71) on *2017 Guidelines for ballast water exchange* (G6), as set out in annex 9.

***Guidelines for risk assessment under regulation A-4 of the BWM Convention* (G7)**

4.82 The Committee adopted resolution MEPC.289(71) on 2017 *Guidelines for risk assessment under regulation A-4 of the BWM Convention* (G7), as set out in annex 10.

Ballast water management for ships operating exclusively in a specified area

4.83 The Committee approved BWM.2/Circ.52/Rev.1 on *Guidance on entry or re-entry of ships into exclusive operation within waters under the jurisdiction of a single Party*, superseding BWM.2/Circ.52.

Manual on Ballast Water Management – How to do it

4.84 The Committee approved the finalized Manual on *Ballast Water Management – How to do it,* as set out in annex 11, for publication and requested the Secretariat to carry out final editing and any editorial corrections that might be identified, as appropriate.

Experience-building phase

4.85 The Committee adopted resolution MEPC.290(71) on *The experience-building phase associated with the BWM Convention,* as set out in annex 12; and requested the Secretariat to provide an assessment, for consideration by MEPC 72, of the expected budgetary implications for the Organization, if the data gathering and analysis plan for the experience-building phase were to be approved at a future session.

4.86 The Committee encouraged Member States and interested parties to commence the data gathering associated with the experience-building phase at their earliest convenience, in anticipation of the future approval of the data gathering and analysis plan.

Future work

4.87 The Committee agreed to re-establish the BWRG at MEPC 72, in accordance with the provisions of regulation D-5 of the BWM Convention.

5 AIR POLLUTION AND ENERGY EFFICIENCY

5.1 The Committee agreed to consider under this agenda item, in addition to the 26 documents submitted, the following documents:

.1 MEPC 71/2 (Secretariat) concerning the outcome of MSC 97 related to minimum propulsion power to maintain the manoeuvrability of ships in adverse conditions; and

.2 five documents submitted under agenda item 9 concerning the outcome of PPR 4, i.e. MEPC 71/9 (Secretariat), MEPC 71/9/1 (Austria et al.), MEPC 71/9/3 (Denmark), MEPC 71/9/7 (IACS) and MEPC 71/INF.19 (Austria et al.).

OUTCOME OF PPR 4

5.2 The Committee considered the action requested of it by PPR 4 concerning air pollution prevention (MEPC 71/9, paragraphs 2.11, 2.12 and 2.17) and took decisions as outlined hereunder.

Impact on the Arctic of emissions of Black Carbon from international shipping

5.3 The Committee noted the progress made on the consideration of the impact on the Arctic of emissions of Black Carbon from international shipping, including the timeline for the finalization of the work developed by PPR 4, and agreed to reflect this timeline in the next biennial agenda.

2017 Guidelines for the discharge of exhaust gas recirculation (EGR) bleed-off water

5.4 The Committee considered the draft MEPC resolution on the *2017 Guidelines for the discharge of exhaust gas recirculation (EGR) bleed-off water* developed by PPR 4 with a view to adoption at this session.

5.5 In this regard, the Committee also had for its consideration the following documents:

.1 MEPC 71/9/3 (Denmark) proposing to delete relevant requirements on turbidity from the draft 2017 Guidelines when an EGR system is in operation with a fuel oil complying with the relevant value in regulation 14 of MARPOL Annex VI; and

.2 MEPC 71/9/7 (IACS) proposing a number of improvements to the text of the draft 2017 Guidelines and identifying several issues which may need technical consideration.

5.6 In the ensuing discussion, the following comments were, inter alia, made:

.1 since the objective of controlling the bleed-off water when the EGR system operated with compliant fuel oil was to ensure that the 15 ppm oil limit for the discharge was not exceeded, turbidity measurement should be deleted from the bleed-off water discharge requirement;

.2 whilst turbidity was not the goal, its measurement was included in the *2015 Guidelines for Exhaust Gas Cleaning Systems* and so should be included in the EGR guidelines;

.3 guidelines should not include requirements which were not contained in the regulations and therefore turbidity should not be included;

.4 the inclusion of the turbidity measurement in the bleed-off water discharge requirement had been fully discussed by PPR 4 and the Committee should therefore agree to the draft guidelines as finalized by PPR 4; and

.5 there was a need to link the guidelines to the NO_X Technical Code 2008 and amendments to the *2009 Guidelines for Port State Control of MARPOL Annex VI* should be further considered.

5.7 Following discussion, the Committee, having noted support for the further consideration of documents MEPC 71/9/3 and MEPC 71/9/7, instructed PPR 5 to reconsider and finalize the draft guidelines, taking into account the two documents and the discussion at this session, with a view to adoption at MEPC 73.

2017 SCR Guidelines

5.8 The Committee adopted resolution MEPC.291(71) on *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*, as set out in annex 13.

Review of the 2015 Guidelines for Exhaust Gas Cleaning Systems

5.9 The Committee recalled that MEPC 69 had agreed to include a new output on "Review of the 2015 Guidelines for Exhaust Gas Cleaning Systems (resolution MEPC.259(68))" in its 2018-2019 biennial agenda, with three sessions needed to complete the work (MEPC 69/21, paragraphs 19.4 and 19.5) and that PPR 4 had included the item in the provisional agenda for PPR 5.

5.10 The Committee noted the following documents related to the new output and agreed to forward them to PPR 5 for consideration under the aforementioned agenda item:

.1 MEPC 71/9/1 (Austria et al.) providing clarification regarding the consistency and practicability of the Guidelines for exhaust gas cleaning systems, without weakening the level of protection to the marine environment provided by the existing Guidelines; and

.2 MEPC 71/INF.19 (Austria et al.) identifying the need for harmonization of procedures to ensure an adequate confidence level and comparability in different washwater sampling and analysis campaigns.

AIR POLLUTION FROM SHIPS

Fuel oil quality

5.11 The Committee recalled that MEPC 69 had re-established the Correspondence Group on Fuel oil quality, under the coordination of the United States, to further develop draft guidance on best practice for fuel oil purchasers/users and Member States/coastal States and requested the Group to report to MEPC 71.

5.12 The Committee considered the report of the Correspondence Group (MEPC 71/5/3 and MEPC 71/INF.8) providing draft best practice for fuel oil purchasers/users and draft best practice for Member States/coastal States.

Draft best practice for fuel oil purchasers/users

5.13 The Committee considered the draft best practice for fuel oil purchasers/users, as set out in annex 1 to the report (MEPC 71/5/3). In the ensuing discussion, the following comments were, inter alia, made:

.1 recognized organizations should be removed from the list of parties that purchasers are obliged to notify when they receive off-spec fuel oil; and

.2 ISO had recently published ISO 8217:2017, which addressed the addition of a new class of distillates allowing for bio-fuel blends with a maximum Fatty Acid Methyl Esters (FAME) content of 7.0 volume %; when using consecutive bunkers from different areas with various blending formulations, consideration should be given to the characteristics of those fuels, fuels of the same viscosity grade with similar densities were likely to be compatible but the compatibility of two fuels was highly dependent on the composition of the actual fuels; test methods to determine the compatibility of two fuels and predict the long term stability of a fuel were provided; the ISO standard should be regarded as guidelines with best industry practice for all the relevant stakeholders to ensure the safe navigation of their ships using low sulphur fuel oils.

5.14 Following discussion, the Committee instructed the Working Group to finalize the draft guidance on best practice for fuel oil purchasers/users, using annex 1 to document MEPC 71/5/3.

Draft best practice for Member State/coastal State

5.15 The Committee considered the draft best practice for Member States/coastal States, as set out in annex 2 to the report (MEPC 71/5/3). In the ensuing discussion, the following comments were, inter alia, made:

.1 the work on the development of draft best practice would overlap with the work on the new output on "Consistent implementation of regulation 14.1.3 of MARPOL Annex VI" and, therefore, further work should be fully coordinated with the new output; and

.2 the best practice should be finalized before the 0.50% global sulphur limit became effective in 2020.

5.16 Following discussion, having noted the progress made by the Correspondence Group, the Committee re-established the Group, under the coordination of the Unites States[3], and instructed it to:

.1 finalize the draft guidance on best practice for Member States/coastal States, using annex 2 to document MEPC 71/5/3, taking into account the comments made at MEPC 71 and the discussion at PPR 5 on the new output on "Consistent implementation of regulation 14.1.3 of MARPOL Annex VI"; and

.2 submit a report to MEPC 73.

5.17 In this connection, the Committee, having recalled that MEPC 69 had encouraged the fuel oil supply industry to develop draft best practice for fuel oil providers, taking into account annex 1 to document MEPC 69/5/3 (MEPC 69/21, paragraph 5.14), reiterated its request to the fuel oil supply industry to submit pertinent proposals to MEPC 72.

Ozone-depleting substances used to service ships

5.18 The Committee recalled that MEPC 70, having noted that the 28th Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer (MOP 28), held in October 2016, had adopted the Kigali Amendments, which amended the Protocol to include control measures for hydrofluorocarbons (HFCs) and a new Annex F listing the controlled HFCs, and had requested the Secretariat to continue liaising with the Ozone Secretariat and provide an update on the work of the Montreal Protocol for consideration at this session (MEPC 70/18, paragraphs 5.61 and 5.62).

5.19 The Committee noted the updated information on the decision by the Parties to the Montreal Protocol on the treatment of ozone-depleting substances (ODS) provided in document MEPC 71/5 (Secretariat) and requested the Secretariat to continue liaising with the Ozone Secretariat and to provide an update on the work of the Montreal Protocol for consideration at MEPC 72.

[3] **Coordinator:**
Mr. W. M. Lundy
Marine Safety, Security and Stewardship
Systems Engineering Division
U.S. Coast Guard
Tel.: +1 202 372-1379
Email: Wayne.M.Lundy@uscg.mil

Sulphur monitoring for 2016

5.20 The Committee recalled that, in accordance with regulation 14.2 of MARPOL Annex VI and the *2010 Guidelines for monitoring the worldwide average sulphur content of fuel oils supplied for use on board ships* (resolution MEPC.192(61), as amended), the results of sulphur monitoring should be presented to a subsequent session of the Committee every year.

5.21 In this regard, the Committee, having considered document MEPC 71/5/1 (Secretariat), noted the outcome of the monitoring of the worldwide average sulphur content of marine fuel oils supplied for use on board ships for 2016, based on information provided by the four sampling and testing service providers, which identified the worldwide average sulphur content (i.e. three-year rolling average) of residual fuel oil as 2.50% and of distillate fuel oil as 0.10%; and requested the Secretariat to continue providing information on this matter annually to the Committee.

Unified Interpretation on engine test cycles required by the NO_X Technical Code 2008

5.22 The Committee, having considered document MEPC 71/5/4 (IACS) providing the latest version of IACS Unified Interpretation MPC 51 on engine test cycles as required by paragraph 3.2.1 of the NO_X Technical Code 2008, forwarded this document to PPR 5 for consideration under its agenda item on "Unified interpretation to provisions of IMO environment-related Conventions".

Unified fuel oil verification procedure for different kinds of fuel oil samples

5.23 The Committee considered document MEPC 71/5/9 (China), proposing draft amendments to regulation 18 and appendix VI of MARPOL Annex VI to develop a unified verification procedure for both bunker representative and in-use fuel oil samples.

5.24 In the ensuing discussion, the following comments were, inter alia, made:

.1 the proposal was supported and should be considered further;

.2 while the intention of the proposal was generally supported, a verification procedure for in-use fuel oil sample should be addressed in guidelines since MARPOL Annex VI did not have a requirement for sampling of in-use fuel oil; and

.3 amendments to MARPOL Annex VI should be to regulation 14 and not regulation 18.

5.25 Following consideration, the Committee forwarded document MEPC 71/5/9 to PPR 5 for consideration under its agenda item on "Amendments to regulation 14 of MARPOL Annex VI to require a dedicated sampling point for fuel oil".

ENERGY EFFICIENCY OF SHIPS

EEDI reviews required under regulation 21.6 of MARPOL Annex VI

5.26 The Committee recalled that:

.1 in accordance with regulation 21.6 of MARPOL Annex VI, at the beginning of phase 1 and at the midpoint of phase 2, the Organization shall review the status of technological developments and, if proven necessary, amend the time periods, the EEDI reference line parameters for relevant ship types and the reduction rate; and

.2 MEPC 70, having considered the report of the Correspondence Group on EEDI review, established at MEPC 67, had agreed to retain the current reduction rates, time periods and EEDI reference line parameters in the phase 2 requirements for ship types other than ro-ro cargo and ro-ro passenger ships (MEPC 70/18, paragraph 5.31).

Ro-ro cargo and ro-ro passenger ships

5.27 The Committee recalled that MEPC 70, having noted that the discussion on ro-ro cargo and ro-ro passenger ships had identified the need for further information, experience and data, had invited interested Member Governments and international organizations to submit to this session concrete proposals for relevant amendments to the EEDI requirements and/or relevant guidelines for ro-ro cargo and ro-ro passenger ships (MEPC 70/18, paragraph 5.27).

5.28 In this regard, the Committee considered document MEPC 71/5/10 (Denmark), proposing to develop guidelines on how to use the equivalent method in regulation 4 of MARPOL Annex VI to comply with the EEDI requirements.

5.29 In the ensuing discussion, the following comments were, inter alia, made:

.1 the proposal should not be supported as it was difficult to see how equivalence could be determined in accordance with the current provisions;

.2 consideration should be given to adherence to the formulae and procedures already adopted to provide certainty to shipbuilders;

.3 the methodology must be transparent to ensure the ship was as least as effective in terms of environmental protection and the development of guidelines was therefore supported;

.4 guidelines should be developed to support a goal-based approach in the spirit of the EEDI to enhance energy efficiency, and the proposal did not change the goal but permitted an alternative approach to demonstrate required energy efficiency;

.5 this approach was already possible pursuant to regulation 4 of MARPOL Annex VI, however, it needed to be clear and transparent and should not be of a general nature; the EEDI for small passenger ships also needed to be considered and a goal-based approach could be used;

.6 it was not clear that regulation 4 of MARPOL Annex VI could be applied as the EEDI needed to be calculated before an equivalence could be identified;

.7 it was worth exploring a goal-based approach as, if it was suitable for safety considerations, then it should be suitable for energy efficiency provisions; and

.8 the proposal was a pragmatic approach to address situations where current and novel ship designs did fit readily within the EEDI framework.

5.30 Following consideration, the Committee, having noted the views of several delegations regarding the application of regulation 4 of MARPOL Annex VI to this matter, agreed that the proposal constituted a new output and invited interested Member Governments to submit relevant proposals to the Committee, in accordance with the Committees' Organization and method of work (MSC-MEPC.1/Circ.5).

5.31 The Committee also considered documents MEPC 71/5/14 and MEPC 71/INF.31 (Denmark et al.) proposing amendments to regulation 21.3 of MARPOL Annex VI with regard to the EEDI reference line parameters for ro-ro cargo and ro-ro passenger ship types and providing supplementary information on an inconsistency about the effect on estimated index values (EIV) as induced by the increase in power demand when comparing the summer load draught with the design draught condition at constant speed.

5.32 In the ensuing discussion, the following comments were, inter alia, made:

.1 the introduction of special measures for such ships was supported but the baseline should not be amended and instead a correction factor should be considered;

.2 further review was required but the proposed 20% off-set was not supported; the same justification could be applied to other ship types and there was a need to be prudent; the large tonnage limit was supported and could be applied to tankers and bulk carriers;

.3 there was a need and opportunity to ensure that EEDI requirements were as robust as possible and free of concerns about integrity; and the proposed amendments to regulation 21.3 of MARPOL Annex VI were supported, along with the large tonnage threshold; and

.4 there was a need to retain the EEDI reference line parameters.

5.33 Following consideration, the Committee instructed the Working Group to consider the proposals in document MEPC 71/5/14 and advise the Committee accordingly.

Correction factors for ice class ships

5.34 The Committee recalled that MEPC 70, having considered the coefficient for ice class ships for phase 2 identified by the Correspondence Group on EEDI review (MEPC 70/5/15, paragraph 22.2), had invited interested Member Governments and international organizations to submit concrete proposals for amendments concerning correction factors for ice class ships to this session.

5.35 In this regard, the Committee had for its consideration the following documents:

.1 MEPC 71/5/2 (Russian Federation) concerning restrictions on implementation of energy saving devices on ice class ships; the necessity to include minimum propulsion power requirements of classification societies for ice going ships in the *Guidelines for determining minimum propulsion power to maintain the manoeuvrability of ships in adverse conditions*; and the possibility of exclusion from EEDI requirements for ships having an ice class higher than 1A Super;

.2 MEPC 71/5/6 and MEPC 71/INF.16 (Finland, Sweden) proposing amendments to the capacity correction factors for ice class ships in the *2014 Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI) for new ships*; and providing supplementary information on calculations related to the draft amendments to the capacity correction factors for ice class ships proposed in document MEPC 71/5/6; and

.3 MEPC 71/5/7 and MEPC 71/INF.7 (Russian Federation) proposing amendments to MARPOL Annex VI to exclude ships having an ice class higher than 1A Super from the EEDI requirements; and providing the outcome of an analysis of the possibility of applying EEDI requirements to ice going ships, in particular with ice class above 1A Super.

5.36 In the ensuing discussion, the following comments were, inter alia, made:

.1 both correction factors for ice class ships, i.e. power correction factor and capacity correction factor, were influential and needed to be considered at the same time, and an amendment to the requirements needed careful consideration to avoid overly burdening ship builders with new design requirements;

.2 an exemption could lead to a change in the EEDI framework and any exemption should be limited and consideration given to the use of correction factors to avoid inconsistency with MARPOL Annex VI regulations and EEDI guidelines;

.3 there was a need to consider the safe operation of ice class ships and an exemption from the energy efficiency requirements to reflect the characteristics of ice class ships would be more realistic; and regulation 19 of MARPOL Annex VI should be amended following further evaluation and review; and

.4 there were several ongoing studies due to be completed in the near future that could inform the deliberations of this matter further.

5.37 Following consideration, the Committee instructed the working group to consider documents MEPC 71/5/2, MEPC 71/5/6, MEPC 71/5/7, MEPC 71/5/INF.7 and MEPC 71/INF.16 on correction factors for ice class ships and advise the Committee accordingly.

EEDI database

5.38 The Committee:

.1 noted document MEPC 71/INF.14 (Secretariat) providing a summary of data information for the 2,443 ships currently contained in the EEDI database; and

.2 considered document MEPC 71/5/5 (Secretariat) inviting it to consider several issues concerning the EEDI database, including clarifications and options to ensure anonymity and consistency of reporting.

5.39 Following consideration, the Committee:

.1 endorsed the following definitions and clarifications for dimensional parameters, ship speed and power of main engine(s):

.1 "length between perpendiculars (L_{pp})" should be "Length between perpendiculars, L_{pp}" as defined in paragraph 2.13 of the *2014 Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI) for new ships* (resolution MEPC.245(66), as amended) (2014 EEDI Calculation Guidelines);

.2 "breadth (B_s)" should be "Breadth, B_s" as defined in paragraph 2.16 of the 2014 EEDI Calculation Guidelines;

.3 "draught" should be "Summer load line draught, d_s" as defined in paragraph 2.15 of the 2014 EEDI Calculation Guidelines;

.4 with regard to "draught or depth", noting that "depth" was not identified in the International Energy Efficiency Certificate nor in any guidelines related to EEDI regulations, the inclusion of "draught" only would be appropriate;

.5 "ship speed (V_{ref})" should be "V_{ref}" as defined in paragraph 2.2 of the 2014 EEDI Calculation Guidelines; and

.6 "power of main engine(s) (P_{ME})" should be "P_{ME}" as defined in paragraph 2.5.1 of the 2014 EEDI Calculation Guidelines;

.2 agreed to the anonymization of data, as follows:

.1 length between perpendiculars: rounding up to the nearest 10 (m);

.2 breadth and draught: rounding up to the nearest 1 (m);

.3 ship speed: rounding up to the nearest 0.5 (knot); and

.4 power of main engine(s): rounding up to the nearest 100 (kW);

.3 agreed to the proposed approach for reporting information on innovative technologies, i.e. in cases where an innovative energy efficiency technology installed on a ship was already included in the *2013 Guidance on treatment of innovative energy efficiency technologies for calculation and verification of the attained EEDI* (MEPC.1/Circ.815), identification of the name of the

technology only would be appropriate, otherwise the submitter should provide the name, outline and means/ways of performance of the technology;

.4 endorsed the *Standard format for voluntary submission of EEDI information to be included in the EEDI database*, as set out in annex 14;

.5 agreed to the reporting of the EEDI information in the EEDI database to future sessions of the Committee, as follows:

.1 the information should be posted in the MARPOL Annex VI module of GISIS; and

.2 a summary and graphical representations of the EEDI information submitted should be presented to future sessions of the Committee as an information document; and

.6 requested the Secretariat to continue submitting EEDI information to the Committee, in accordance with the decisions made at this session.

Review of the EEDI reduction rates and dates beyond phase 2

5.40 The Committee had for its consideration the following documents:

.1 MEPC 71/5/12 (Japan) proposing the re-establishment of the Correspondence Group to undertake the review of the status of technological developments required under regulation 21.6 of MARPOL Annex VI and providing draft terms of reference; and

.2 MEPC 71/5/16 and MEPC 71/INF.33 (CSC) providing information on a study to investigate trends in the design efficiency of ships built between 2009 and 2016 using the EIV which found that design efficiency improvements appeared to have stalled in 2016 and identifying that a considerable number of ships in different categories already complied with phase 2 and even phase 3 EEDI requirements.

5.41 In the ensuing discussion, the following comments were, inter alia, made:

.1 the Japanese proposal was supported but there was a need to consider amendments to MARPOL Annex VI other than as proposed in the timeline;

.2 the proposed amendment to lower the percentage of rated installed power (MCR) for P_{ME} from 75% to 68% was not supported; and

.3 the conclusions of the study set out in document MEPC 71/5/16 were not agreed as EIV was substantially different from EEDI, as it did not reflect the complexity, and so a comparative study was misleading and had the potential to undermine years of effort.

5.42 Following consideration, the Committee instructed the Working Group to finalize draft terms of reference for a correspondence group for the EEDI review beyond phase 2, using the annex to document MEPC 71/5/12 as the basis and taking into account document MEPC 71/5/16.

Minimum propulsion power to maintain the manoeuvrability of ships in adverse conditions

5.43 The Committee recalled that MEPC 70, having recalled that MEPC 68 had agreed to await the outcome of relevant research projects (MEPC 68/21, paragraph 3.81) and that the full text of the draft revision of the *2013 Interim guidelines for determining minimum propulsion power to maintain the manoeuvrability of ships in adverse conditions* (resolution MEPC.262(68), as amended by resolutions MEPC.255(67) and MEPC.262(68)) (2013 Interim Guidelines) would be submitted to this session, had agreed to note all documents submitted to MEPC 70 on this issue and invited interested Member Governments and international organizations to take them, and the views expressed in plenary, into account when preparing the full text of draft revised 2013 Interim Guidelines (MEPC 70/18, paragraph 5.43).

5.44 In this connection, the Committee noted that that MSC 97 had invited it to forward the amendments to the 2013 Interim Guidelines, once finalized, to the MSC, with a view to ensuring that safety aspects had been adequately covered (MEPC 71/2, paragraph 2.1).

5.45 In this regard, the Committee had for its consideration the following documents:

.1 MEPC 71/5/8 (China) proposing amendments to the 2013 Interim Guidelines in light of the thrust deduction factor and the added resistance in waves;

.2 MEPC 71/5/13 and MEPC 71/INF.28 (Denmark et al.) providing information on the progress and present status of the work of developing a draft revision of the 2013 Interim Guidelines and identifying that the co-sponsors still had different views on the adverse environmental conditions and therefore the draft revision, presented in document MEPC 71/INF.28, was considered still not mature enough to be finalized at this session; and

.3 MEPC 71/INF.29 (Denmark et al.) providing technical background for the draft revision of the 2013 Interim Guidelines as given in document MEPC 70/INF.28.

5.46 In the ensuing discussion, the following comments were, inter alia, made:

.1 power was not the correct parameter as ships with the same power available but with different shapes might result in different outcomes, and rather the determining metric should have been speed;

.2 there was a limit to the possible hydrodynamic improvement in new ship designs, making it harder to comply with the requirements; and the focus should be on designing more slender ships and not just reducing power;

.3 the proposal was not yet mature and required further consideration, therefore extending the 2013 Interim Guidelines to phase 2 was supported;

.4 some ships reported issues regarding insufficient power and the matter was a cause of concern in regard to ensuring safe navigation;

.5 there were serious concerns about the proposed weather conditions which were considered to be too conservative to appropriately reflect actual seagoing conditions; and

.6 it was not always possible for shipmasters to avoid severe weather conditions and reducing minimum power would only increase the danger to seafarers and the environment these measures were seeking to protect.

5.47 Following consideration, the Committee agreed to:

.1 extend the 2013 Interim Guidelines to EEDI phase 2 and requested the Secretariat to revise MEPC.1/Circ.850/Rev.1 accordingly, for dissemination as MEPC.1/Circ.850/Rev.2;

.2 continue the discussion on this matter at the next session and invited interested Member Governments and international organizations to make every effort to further develop the draft revised 2013 Interim Guidelines and submit proposals to MEPC 72; and

.3 keep the MSC informed of the ongoing work.

Review of reduction factors for existing ships which have undergone major conversion

5.48 The Committee recalled that MEPC 70, having noted the discussions of the Working Group on Air pollution and energy efficiency concerning reduction factors for existing ships having undergone major conversion proposed in document MEPC 70/5/10 (Republic Korea), had agreed to keep this proposal in abeyance and invited interested Member Governments and international organizations to submit concrete proposals with sufficient background information to this session (MEPC 70/18, paragraph 5.70).

5.49 In this regard, the Committee considered document MEPC 71/5/11 (Republic of Korea) providing detailed information on energy efficiency improvement for existing ships and proposing that, when an existing ship had undergone a major conversion for improvement of energy efficiency, EEDI phase 0 reduction factors should be applied to the ship regardless of the time of the major conversion.

5.50 In the ensuing discussion, the following comments were, inter alia, made:

.1 the proposal was not in accordance with the regulations and its adoption would not promote the removal of low-energy efficient ships from the fleet;

.2 it was unclear to which ships the proposal was expected to apply to; and

.3 major conversion to enhance the energy efficiency of a ship should not be discouraged and the proposal should be considered further.

5.51 Following consideration, the Committee instructed the working group to consider document MEPC 71/5/11 and advise the Committee accordingly.

Information on energy efficiency of ships

5.52 The Committee noted document MEPC 71/INF.13 (Secretariat) providing information on the International Conference on Maritime Energy Management (MARENER 2017) held in Malmö, Sweden, in January 2017, hosted by the World Maritime University (WMU).

EFFICIENT IMPLEMENTATION OF MARPOL ANNEX VI PROVISIONS

5.53 The Committee considered document MEPC 71/5/15 (China et al.) providing an analysis of the situation concerning the implementation of MARPOL Annex VI provisions and proposing a draft Assembly resolution on enhancing environmental protection against ship emissions and compliance with MARPOL Annex VI.

5.54 In the ensuing discussion, the following comments were, inter alia, made:

.1 Assembly resolution A.929(22) on *Entry into force of Annex VI to MARPOL 73/78*, adopted on 29 November 2001, encouraged accession and the resolution could be brought to the attention of the Assembly with a request that it reiterated the views expressed therein;

.2 whilst the 88 Contracting Parties to MARPOL Annex VI register some 96% of the world fleet, there were 63 coastal States that were not bound by the provisions of MARPOL Annex VI, raising concern that the implementation of the 0.50% sulphur limit for fuel oil used by ships from 2020 may not be robustly enforced;

.3 global application was required and the principles behind the proposal were supported and there should be a specific reference to support from the Technical Cooperation Division; and

.4 there was sympathy for the problem identified and for working with the Secretariat to promote implementation through providing donor funds to support MARPOL Annex VI-focused technical cooperation activities and other action that went beyond resolution A.229(22).

5.55 Following consideration, the Committee agreed to invite A 30 to recall resolution A.229(22) on *Entry into force of Annex VI to MARPOL 73/78* and to note that the issues the resolution sought to address remained valid, in particular the need for the provision of technical assistance to support Member State accession, including preparation of national legislation, and for effective implementation and enforcement of the provisions of MARPOL Annex VI.

ESTABLISHMENT OF A WORKING GROUP

5.56 The Committee established the Working Group on Air pollution and energy efficiency and instructed it, taking into account comments and decisions made in plenary, to:

.1 finalize draft guidance on best practice for fuel oil purchasers/users, using annex 1 to document MEPC 70/5/3;

.2 consider the proposals in document MEPC 71/5/14 on EEDI requirements for ro-ro cargo and ro-ro passenger ships and advise the Committee accordingly;

.3 consider documents MEPC 71/5/2, MEPC 71/5/6, MEPC 71/5/7, MEPC 71/5/INF.7 and MEPC 71/INF.16 on correction factors for ice class ships and advise the Committee accordingly;

.4 finalize draft terms of reference for a correspondence group on the EEDI review beyond phase 2, using the annex to document MEPC 71/5/12 as the basis and taking into account document MEPC 71/5/16 and the consideration of ice class ships under item 3 above; and

.5 consider document MEPC 71/5/11 on reduction factors for existing ships which have undergone major conversion and advise the Committee accordingly.

REPORT OF THE WORKING GROUP

5.57 Having considered the report of the Working Group (MEPC 71/WP.8), the Committee approved it in general and took action as indicated below.

Guidance on best practice for fuel oil purchasers/users

5.58 The Committee noted the Group's discussion on the draft best practice for fuel oil purchasers/users (MEPC 71/WP.8, annex 1) and invited interested Member Governments and international organizations to further consider it and submit comments and proposals to MEPC 72, with a view to finalization of the best practice at that session.

EEDI reviews required under regulation 21.6 of MARPOL Annex VI

Ro-ro cargo and ro-ro passenger ships

5.59 The Committee:

.1 noted the Group's discussion on the reference parameters for ro-ro cargo and ro-ro passenger ships, including the introduction of DWT threshold values for large size ships;

.2 approved draft amendments to regulation 21 of MARPOL Annex VI regarding EEDI requirements for ro-ro cargo and ro-ro passenger ships, as set out in annex 15, with a view to adoption at MEPC 72, and requested the Secretary-General to circulate them in accordance with MARPOL Article 16(2); and

.3 requested the co-sponsors of document MEPC 71/5/14 proposing new reference lines for ro-ro cargo and ro-ro passenger ships to submit background data to the Secretariat for confirmation purposes.

EEDI reduction requirements and correction factors for ice class ships

5.60 The Committee noted the Group's discussion on the EEDI reduction requirements and correction factors for ice class ships (MEPC 71/WP.8, paragraphs 18 to 23) and agreed to instruct the Correspondence Group on EEDI review beyond phase 2 to consider the matter further (see paragraphs 5.61.3 to 5.61.5).

Terms of reference for a correspondence group for EEDI review beyond phase 2

5.61 The Committee endorsed the view of the Group on the timeline for the work of a Correspondence Group on EEDI review beyond phase 2 and that the proposed revised definition of power of main engine (MEPC 71/5/12, paragraph 12) should be considered as part of the discussion of minimum propulsion power for ships; and established a Correspondence Group on EEDI review beyond phase 2, under the coordination of Japan[4], with the following terms of reference:

.1 consider, collate and analyse information and data pertinent to the review, including:

.1 information obtained from the EEDI database;

.2 publicly available and verifiable information from shipyards, naval architects, engine manufacturers and others regarding measurable energy improvements occurring from the actual installation and use of energy-saving technologies on ships, either in service or in demonstration programmes, including the technologies identified in document MEPC 68/INF.38; and

.3 such other publicly available and verifiable information as the correspondence group identifies as being relevant;

.2 using the above data and information, consider the status of technological developments for improvement of energy efficiency of the EEDI regulations in chapter 4 of MARPOL Annex VI and the possible future EEDI reduction rate, including:

.1 range of technologies (e.g. engine technologies, materials, appliances, apparatus, alternative fuels, reduction of engine power and speed, hull improvements) that may be used to comply with the possible more stringent required EEDI;

.2 current and future use of these technologies onboard ships with a characterization of their introduction and demonstration in real world applications, including consideration of cost benefit analysis; and

.3 progress of ship builders, designers and engine manufacturers towards incorporating such technologies as relevant to meeting the required EEDI;

.3 consider if the current correction factors for ice class ships should be amended, taking into account documents MEPC 71/5/6 and MEPC 71/INF.16, and if proven necessary, develop draft amendments to the *2014 Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI) for new ships*;

[4] **Coordinator:**
Mr. Yasufumi Onishi
Japan Ship Technology Research Association (JSTRA)
10-9, Akasaka 2-chome, Minato-ku,
Tokyo, 107-0052 Japan
Tel: +81-3-5575-6427
Email: onishi@jstra.jp

.4 consider the proposal that a margin should be given to the reference line of ships having an ice class, taking into account documents MEPC 71/5/2 and MEPC 71/INF.7;

.5 consider how ships ice-strengthened in accordance with ice classes higher than IA Super should be defined and excluded from the EEDI regulations, taking into account documents MEPC 71/5/2, MEPC 71/5/7 and MEPC 71/INF.7;

.6 recommend to MEPC 73 the time period and the reduction rates for EEDI phase 3 requirements, taking into account the decisions made at MEPC 70;

.7 consider possible introduction of EEDI phase 4 requirements with associated time period and reduction rates; and

.8 submit a progress report to MEPC 72, an interim report to MEPC 73 and a final report to MEPC 74 in 2019.

5.62 In this regard, and in particular concerning the need for future requirements to not adversely impact on the safety of ships, the Committee noted a statement by the observer from ICS, supported by other delegations, set out in annex 29.

Review of reduction factors for existing ships which have undergone major conversion

5.63 The Committee endorsed the Group's view that there was no need to amend regulations related to a major conversion in chapter 4 of MARPOL Annex VI.

6 FURTHER TECHNICAL AND OPERATIONAL MEASURES FOR ENHANCING THE ENERGY EFFICIENCY OF INTERNATIONAL SHIPPING

6.1 The Committee recalled that:

.1 MEPC 69 had reaffirmed the agreement that data collection was the first step of a three-step approach, the second step being data analysis and the third decision-making on what further measures, if any, were required (MEPC 69/21, paragraph 6.8);

.2 MEPC 70 had adopted, by resolution MEPC.278(70), new regulation 22A of MARPOL Annex VI related to the data collection system for fuel oil consumption of ships and, by resolution MEPC.282(70), the *2016 Guidelines for the development of a Ship Energy Efficiency Management Plan (SEEMP)* to describe the methodology to be used to collect the data and the processes to be used to report them to the ship's flag Administration; and

.3 MEPC 70 had re-established the Correspondence Group on the data collection system, under the coordination of Japan, with terms of reference as set out in paragraph 6.11 of document MEPC 70/18.

6.2 The Committee also recalled that MEPC 69 had agreed that ship energy efficiency indices should be considered under step 3 of the three-step approach and that, consequently, document MEPC 69/6/6 (Argentina et al.) should be kept in abeyance until a future session of the Committee. In this regard, the Committee, noting that the three-step approach had been incorporated in the *Roadmap for developing a comprehensive IMO Strategy on reduction of GHG emissions from ships* approved by MEPC 70, agreed to consider document MEPC 69/6/6 under agenda item 7.

Development of the IMO Ship Fuel Oil Consumption Database

6.3 The Committee had for its consideration document MEPC 71/6 (Secretariat), providing an overview of the development of the IMO Ship Fuel Oil Consumption Database as a module within the GISIS platform, including proposed methodologies for anonymization of the fuel oil consumption data, and agreed to consider this document together with the report of the Correspondence Group on the data collection system (MEPC 71/6/1).

Report of the correspondence group on the data collection system

6.4 The Committee had for its consideration documents MEPC 71/6/1 and MEPC 71/INF.3 (Japan), presenting the report of the Correspondence Group on the data collection system, including draft Guidelines for Administration data verification procedure (MEPC 71/6/1, annex 1), draft Guidelines for the development and management of the IMO Ship Fuel Oil Consumption Database (MEPC 71/6/1, annex 2) and a draft MEPC circular to address non-Party ships submitting data to the IMO Ship Fuel Oil Consumption Database (MEPC 71/6/1, annex 3); and a collation of the comments submitted to the Group (MEPC 71/INF.3).

Administration data verification procedures

6.5 The Committee recalled its decision at MEPC 70 that the guidelines were developed to support the implementation of regulations and could not go beyond their scope; and that it had agreed that only the parts of ISO standard 14064 that did not go beyond the scope of regulation 22A of MARPOL Annex VI would be considered (MEPC 70/18, paragraph 6.6.3).

6.6 The Committee considered the draft Guidelines for Administration data verification procedures (MEPC 71/6/1, annex 1) and the options therein. In the ensuing discussion, the following comments were, inter alia, made:

.1 option 2 went beyond the scope and purpose of the data collection system, would introduce an undue burden on industry and administrations, and would lead to severe adverse effects on the system;

.2 option 2 was supported to ensure data was robust for use under the step-two data analysis of the agreed three-step approach; and

.3 option 2 was complex and developed as an accounting standard for GHG emission reporting under monetized systems such as Emission Trading Systems and as such went beyond the scope of regulation 22A of MARPOL Annex VI.

6.7 Following discussion, the Committee instructed the Working Group on Air pollution and energy efficiency, established under agenda item 5, to finalize the draft Guidelines for Administration data verification procedures, using option 1 of annex 1 to document MEPC 71/6/1 as the basis.

IMO Ship Fuel Oil Consumption Database

6.8 The Committee considered the draft Guidelines for the development and management of the IMO Ship Fuel Oil Consumption Database (MEPC 71/6/1, annex 2), together with document MEPC 71/6 (see paragraph 6.3). In the ensuing discussion, the following comments were, inter alia, made:

.1 the proposals made in paragraph 18.1 to 18.4 of document MEPC 71/6 had already been incorporated into the draft Guidelines, and the designation of a contact person in each Administration for the purposes of the database, as set out in paragraph 18.5 of the document, was supported;

.2 pursuant to resolution A.1074(28), GISIS was the appropriate platform to use for the database, and electronic data exchange was the proper approach as it reduced administrative burden, however, there was a need to effectively check duplicate records for the same ship;

.3 the Secretariat should be requested to provide a circular on the format of the XML scheme and advice to Administrations on the software to employ to enable transfer of data to the database;

.4 for ice class data, category A/B/C as defined in the Polar Code should be used;

.5 ice class category A/B/C was given only in the Polar Ship Certificate, however, not all ice class ships had this Certificate; and

.6 further consideration was required for the interface to provide access to the anonymized data.

6.9 Following discussion, the Committee instructed the Working Group to:

.1 finalize the draft Guidelines for the development and management of the IMO Ship Fuel Oil Consumption Database, using annex 2 to document MEPC 71/6/1 as the basis; and

.2 consider document MEPC 71/6 on the development of the IMO Ship Fuel Oil Consumption Database as a module within the GISIS platform and the proposals set out in the document and advise the Committee accordingly.

6.10 In this regard, the Committee requested the Secretariat to further develop the IMO Ship Fuel Oil Consumption Database as a module within the GISIS platform, taking into account the comments and decisions made at this session, and to provide a status report to MEPC 72, having noted that the Secretariat had uploaded a presentation on the database onto the IMO website, available at:

http://www.imo.org/en/OurWork/Environment/PollutionPrevention/AirPollution/Pages/Data-Collection-System.aspx

Non-Party ships submitting data to the IMO Ship Fuel Oil Consumption Database

6.11 The Committee considered the draft MEPC circular to address non-Party ships submitting data to the IMO Ship Fuel Oil Consumption Database (MEPC 71/6/1, annex 3) and, following consideration, instructed the Working Group to finalize it, using annex 3 to document MEPC 71/6/1 as the basis.

Proxy for transport work for ships that do not carry cargo

6.12 The Committee recalled that MEPC 70, having adopted the *2016 Guidelines for the development of a Ship Energy Efficiency Management Plan (SEEMP)*, had invited CLIA, interested Member States and international organizations to submit concrete proposals on a proxy for transport work for ships that do not carry cargo to a future session of the Committee.

Proxy for transport work for offshore and marine contracting vessels

6.13 In this regard, the Committee considered document MEPC 71/6/2 (IMCA) providing information on the difficulty of defining relevant and appropriate proxies for transport work for offshore and marine contracting vessels and recommending that the development of a transport work proxy for such vessels should be kept in abeyance.

6.14 In the ensuing discussion, the following comments were, inter alia, made:

.1 rescue and salvage ships, hydrographic service ships and other ships that did not carry cargo should also be excluded;

.2 exemption from the requirements to submit the data required under regulation 22A of MARPOL Annex VI was not supported;

.3 other indicators for energy efficiency could be used and were already under consideration; and

.4 it would be technically challenging to develop an appropriate transport work proxy for offshore and marine contracting vessels.

6.15 Following consideration, the Committee instructed the Working Group to consider document MEPC 71/6/2 and advise the Committee accordingly.

Proxy for transport work for cruise passenger ships

6.16 The Committee considered document MEPC 71/6/3 (CLIA) proposing to use the number of passengers carried as an appropriate proxy for transport work for cruise passenger ships and to amend the standardized data reporting format for the data collection system (appendix 3 to the 2016 SEEMP Guidelines) to include a column which would read "Number of passengers".

6.17 Following consideration, the Committee instructed the Working Group to consider document MEPC 71/6/3 and advise the Committee accordingly.

Instructions to the Working Group on Air pollution and energy efficiency

6.18 The Committee instructed the Working Group on Air pollution and energy efficiency, established under agenda item 5, taking into account comments and decisions made in plenary, to:

.1 finalize the draft Guidelines for Administration data verification procedures, using option 1 of annex 1 to document MEPC 71/6/1 as the basis;

.2 finalize the draft Guidelines for the development and management of the IMO Ship Fuel Oil Consumption Database, using annex 2 to document MEPC 71/6/1 as the basis, taking into account document MEPC 71/6;

.3 consider document MEPC 71/6 on the development of the IMO Ship Fuel Oil Consumption Database as a module within the GISIS platform and the proposals set out in the document and advise the Committee accordingly;

.4 finalize the draft MEPC circular to address non-Party ships submitting data to the IMO Ship Fuel Oil Consumption Database, using annex 3 to document MEPC 71/6/1 as the basis;

.5 consider document MEPC 71/6/2 on offshore and marine contracting vessels and advise the Committee accordingly; and

.6 consider document MEPC 71/6/3 on a proxy for transport work for cruise passenger ships and advise the Committee accordingly.

Report of the Working Group

6.19 Having considered the part of the report of the Working Group on Air pollution and energy efficiency related to this agenda item (MEPC 71/WP.8, paragraphs 32 to 57 and annexes 4 to 7), the Committee approved it in general and took action as indicated below.

Administration verification of ship fuel oil consumption data

6.20 The Committee noted comments, reiterated by the observer from IACS, on regulations 5.4.5 and 22.2 of MARPOL Annex VI, especially concerning the need for Administrations, or recognized organizations authorized to act on their behalf, to verify compliance with the requirement that all SEEMPs included a description of the methodology used to collect the data and the process to report them. The Committee noted, in particular, IACS's concern that Administrations, or recognized organizations, might face an abundance of SEEMPs submitted for review just prior to the start of the first reporting period, creating a significant administrative burden, and invited Member Governments to be cognizant of this matter.

6.21 The Committee adopted resolution MEPC.292(71) on *2017 Guidelines for Administration verification of ship fuel oil consumption data*, as set out in annex 16, and invited interested Member Governments and international organizations to submit concrete proposals on a sample form of confirmation of compliance pursuant to regulation 5.4.5 of MARPOL Annex VI to MEPC 72.

Development and management of the IMO Ship Fuel Oil Consumption Database

6.22 The Committee adopted resolution MEPC.293(71) on *2017 Guidelines for the development and management of the IMO Ship Fuel Oil Consumption Database*, as set out in annex 17.

6.23 The Committee endorsed the Group's agreement on the development of the IMO Ship Fuel Oil Consumption Database, including data reporting format and submission, data validation and cross-referencing by the database, granularity and anonymity of data, database access and data available to users, data analysis and export, alerts and Administration contact person, and designation of ice class.

Non-Party ships submitting data to the IMO Ship Fuel Oil Consumption Database

6.24 The Committee approved MEPC.1/Circ.871 on *Submission of data to the IMO data collection system of fuel oil consumption of ships from a State not Party to MARPOL Annex VI*.

Proxy for transport work for offshore and marine contracting vessels

6.25 The Committee, having noted the outcome of the discussion of the Group on offshore and marine contracting vessels, including data submission to the IMO Ship Fuel Oil Consumption Database, data analysis stage and an appropriate transport proxy for this type of vessel, invited interested Member Governments and international organizations, in cooperation with IMCA, to submit proposals for guidance on how to deal with offshore and marine contracting vessels under the IMO data collection system.

Proxy for transport work for cruise passenger ships

6.26 With regard to the outcome of the discussion of the Group on a proxy for transport work for cruise passenger ships, the Committee noted that the group had agreed to keep the proposed amendments to the 2016 SEEMP Guidelines in abeyance and to consider them at a future session.

7 REDUCTION OF GHG EMISSIONS FROM SHIPS

7.1 The Committee recalled that MEPC 70 had approved the *Roadmap for developing a comprehensive IMO Strategy on the reduction of GHG emissions from ships* (the Roadmap), (MEPC 70/18, annex 11), which foresaw the adoption of an initial Strategy at MEPC 72 (April 2018) and a revised Strategy at MEPC 80 (spring 2023).

7.2 The Committee recalled also that MEPC 70 had agreed to the establishment of an intersessional working group, to consider how to progress the matter of reduction of GHG emissions from ships and advise the Committee as appropriate and that C 117 had endorsed the holding of two meetings of the intersessional working group in 2017 (the first before MEPC 71 and the second in autumn 2017), as well as, in principle, the holding of further intersessional meetings during the current and the next biennium.

7.3 The Committee noted that the first meeting of the Intersessional Working Group on Reduction of GHG emissions from ships (ISWG-GHG 1) had been held from 26 to 30 June 2017 and its report had been submitted to this session as document MEPC 71/WP.5.

7.4 A number of delegations made general statements. The full text of statements made by the delegations of Tuvalu, Kiribati, the Marshall Islands, Solomon Islands, Saudi Arabia, Fiji, Chile, Argentina, France, Brazil and the Cook Islands, listed here in the order they were

made, are set out in annex 29. The delegations of Vanuatu and Palau requested that they be associated with the views expressed by the delegations of the South Pacific Islands States that had made statements.

UNFCCC matters

7.5 The Secretariat informed the Committee of the outcome of the United Nations Climate Change Conference (COP 22) held in Marrakech, Morocco, in November 2016. This included the forty-fifth session of the UNFCCC's Subsidiary Body for Scientific and Technological Advice (SBSTA 45), which was retained as a body under the 2015 Paris Agreement and had on its agenda an item on "Emissions from fuel used for international aviation and maritime transport".

7.6 The Secretariat also informed the Committee of the outcome of SBSTA 46, held in Bonn, Germany, in May 2017. The Committee noted that information on the Organization's ongoing work would be provided to SBSTA 47, to be held during COP 23, scheduled for 6 to 17 November 2017 in Bonn, Germany.

7.7 In this regard, the Committee noted a statement by the UNFCCC Secretariat, set out in annex 29, providing an update on UNFCCC matters, including a summary of the outcome of COP 22 in Marrakesh and the priorities for COP 23 in Bonn, in light of the outcome of COP 21 in Paris and the implications for the work of the Organization on reducing GHG emissions from international maritime transport. The Committee also noted an invitation by the UNFCCC Secretariat to organize a joint special side event with the ICAO and IMO Secretariats in the margins of COP 23.

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

Reduction of GHG emissions from international shipping

7.9 The Committee had for its consideration the following documents, discussing the way forward to address the reduction of GHG emissions from ships:

.1 MEPC 71/7 (China, India), highlighting that the comprehensive IMO Strategy on reduction of GHG emissions from ships (IMO GHG Strategy) should be durable, balanced and provide confidence; proposing that the IMO GHG Strategy should entail both top-down and bottom-up components, drawing upon the experience from the Paris Agreement; and putting forward a framework for a strategy and its potential elements;

.2 MEPC 71/7/1 (Norway), providing input to the Roadmap; presenting findings of a technical evaluation of currently proposed parameters/indicators on energy efficiency of ships; and providing preliminary views on an indicative timeline and work to be undertaken using the three-step approach;

.3 MEPC 71/7/2 (Republic of Korea), proposing that the direction of the guiding principles for the comprehensive IMO GHG Strategy should be applied in an identical manner, based on the Organization's principle of "no more favourable treatment" (NMFT);

.4 MEPC 71/7/3 (Marshall Islands, Solomon Islands), requesting that the Organization agrees, as part of the initial Strategy proposed to be agreed at MEPC 72, that the level of ambition should be high and an overall target for shipping reduction should be agreed, consistent with a "fair share" of the global burden of reductions necessary to achieve a no more than 1.5°C target;

.5 MEPC 71/7/4 (BIMCO et al.), proposing substantive programmes and obligations designed to improve the near-term and long-term efficiency of international shipping in furtherance of the IMO GHG Strategy;

.6 MEPC 71/7/5 and MEPC 71/INF.34 (BIMCO), presenting an update of the maritime GHG emission projections contained in the Third IMO GHG Study 2014, emphasizing CO_2 emission projections of shipping in three 1.6°C scenarios consistent with the Paris Agreement goal;

.7 MEPC 71/7/6 (Argentina et al.), proposing guiding principles for the IMO GHG Strategy;

.8 MEPC 71/7/7 and MEPC 71/INF.35 (Belgium et al.), introducing a number of emissions scenarios and a potential scientific approach on how the international shipping sector can contribute to meet the temperature goal of the Paris Agreement by establishing a global level of ambition for future GHG emissions from international shipping;

.9 MEPC 71/7/8 (Antigua and Barbuda et al.), proposing that a global emissions pathway was needed for international shipping in which emissions started declining as soon as possible and reduced towards zero in the second half of this century; and that a quantified pathway was a necessary future element of the initial IMO GHG Strategy because it allowed an evaluation of the development of emissions as well as an assessment of the short-, mid- and long-term measures relative to the global level of ambition;

.10 MEPC 71/7/9 (Belgium et al.), addressing the impacts of GHG emission reduction measures on States and their influence on components of maritime transport costs; and strategies that existed to mitigate undesired impacts on States;

.11 MEPC 71/7/10 (Canada), proposing that reaching an agreement on a collective level of ambition that would drive progress through targeted measures be included as part of the IMO GHG Strategy; and that the Strategy should include work in three areas: new ships, the existing fleet, and opportunities for the Organization's efforts to support the reduction of emissions from all shipping;

.12 MEPC 70/7/11 (Japan), commenting on document MEPC 71/7 and introducing documents submitted by Japan to ISWG-GHG 1;

.13 MEPC 70/7/12 (ICS et al.), commenting on document MEPC 71/7/8 and informing about a submission to ISWG-GHG 1 that included some "aspirational objectives" that the Organization might consider on behalf of international shipping, but which should be non-binding in character and must not imply any kind of commitment or intention to place a binding cap on the sector's total CO_2 emissions, or on the CO_2 emissions of individual ships;

.14 MEPC 70/7/13 (Belgium et al.), providing comments on document MEPC 71/7 regarding the need for international shipping to help realize the goal of the Paris Agreement; the timing for a quantified level of ambition; a bottom-up and a top-down approach; and the impact on States;

.15 MEPC 70/7/14 (Greenpeace International et al.), stressing the importance of quickly agreeing a long-term target and reduction pathway for GHG emissions from international shipping that was consistent with the goals of the Paris Agreement; the urgent need to identify and implement immediate near-term measures that would result in early peaking of emissions; the importance of including within the IMO GHG Strategy an overhauled EEDI, consistent with decarbonization of the fleet in the second half of the century; and the need to assess the impacts on vulnerable States in parallel with the consideration of final measures; and

.16 MEPC 71/WP.5, the report of ISWG-GHG 1.

7.10 The Committee also noted document MEPC 71/INF.23 (Republic of Korea), providing research results on methane venting.

7.11 The Committee recalled that, during the consideration of agenda item 6, it had agreed to consider document MEPC 69/6/6 (Argentina et al.) under this agenda item (see paragraph 6.2).

7.12 The Committee noted that several of the documents submitted under this agenda item had also been submitted to the intersessional meeting under the ISWG-GHG 1 symbol, as follows:

.1 MEPC 71/7/1 (Norway), addressed matters covered in more detail in document ISWG-GHG 1/2/1;

.2 MEPC 71/7/3 (the Marshall Islands and Solomon Islands), also submitted as document ISWG-GHG 1/2/2;

.3 MEPC 71/7/4 (BIMCO et al.), also submitted as document ISWG-GHG 1/2/6;

.4 MEPC 71/7/5 and MEPC 71/INF.34 (BIMCO), also submitted as document ISWG-GHG 1/2/3;

.5 MEPC 71/7/7 and MEPC 71/INF.35 (Belgium et al.), also submitted as documents ISWG-GHG 1/2/12 and ISWG-GHG 1/INF.2, respectively;

.6 MEPC 71/7/8 (Antigua and Barbuda et al.), also submitted as document ISWG-GHG 1/2/13;

.7 MEPC 71/7/9 (Belgium et al.), also submitted as document ISWG-GHG 1/2/14;

.8 MEPC 71/7/10 (Canada), also submitted as document ISWG-GHG 1/2/11;

.9 MEPC 71/7/11 (Japan), summarized documents ISWG-GHG 1/2/4 and ISWG-GHG 1/2/5; and

.10 MEPC 71/7/12 (ICS et al.), also submitted as document ISWG-GHG 1/2/9.

7.13 Recognizing that all the substantive documents submitted under this agenda item had already been considered at ISWG-GHG 1, the Committee agreed that they did not need to be introduced and proceeded to consider the report of the Intersessional Working Group (ISWG) (MEPC 71/WP.5).

7.14 During its consideration, the Committee noted that the Group had, inter alia:

.1 considered new GHG emission estimates and future demand for international shipping; agreed that additional IMO GHG studies would be required; and recommended that the Fourth IMO GHG Study should be initiated at MEPC 74 in 2019 (paragraph 14)[5];

.2 noted that the initial IMO GHG Strategy should include level of ambition and guiding principles, and that, in addition to comments being reflected in the report of the Group, a collation of elements to build upon towards the first draft of the initial Strategy should be considered (paragraph 17);

.3 noted that a vision should be included in the IMO GHG Strategy but that this was work in progress (paragraphs 20 and 21);

.4 noted that there was a need to build on the energy efficiency framework already established; to consider further energy efficiency requirements and alternative low-carbon and zero-carbon fuels; and to consider innovative mechanism(s) (paragraph 24);

.5 noted that there was a need for a common understanding of the possible timelines identified in the Roadmap (paragraph 27);

.6 noted a possible list of candidate measures (paragraph 29);

.7 agreed that technical cooperation, including capacity building, needed to be part of the strategy (paragraph 34);

.8 agreed that there was a need for information and updates on the Marginal Abatement Cost Curves (MACC), to have an understanding of the cost and development of technology and low-carbon fuels (paragraph 37.1); and

.9 agreed that ambition and measures needed to be considered in relation to costs and benefits and impacts on States (paragraph 37.2).

7.15 In the ensuing discussion, the following comments were, inter alia, made:

.1 the definition of GHG emission did not include solid particles and therefore these should not be considered under the IMO GHG Strategy, so as not to duplicate efforts already underway in the Organization;

.2 the IMO GHG Strategy should be SMART (specific, measurable, achievable, realistic, time-bound) and contain a vision;

.3 climate change and the mitigation of GHG emissions affected States both locally and internationally;

[5] References in this paragraph are to paragraphs of the report of ISWG-GHG 1 (MEPC 71/WP.5).

.4 for consistency, reference should be made to GHG emissions rather than CO_2 emissions; the 2018 IPCC report on implications of a 1.5°C temperature increase above pre-industrial levels should be considered when developing the IMO GHG Strategy along with the Sustainable Development Goals; and the approach to develop nationally determined contributions would be a better approach than setting a cap on GHG emissions from ships; and

.5 an assessment of the impact on all States was required and a study of technological development was needed to enable the required emission reduction.

7.16 The Committee noted that the ISWG, including document sponsors, had agreed to consider as part of its deliberations the distinct documents that had been submitted to MEPC 71.

7.17 The Committee also noted the consideration of elements specifically identified to be considered under the Roadmap and the progress made, including on the identification of a list of candidate measures. In this regard, the Committee recalled that the Roadmap had been approved by MEPC 70 and agreed that it was not to be negotiated or revisited.

Scheduling of ISWG-GHG 2

7.18 The Committee considered the dates for the second meeting of the ISWG (ISWG-GHG 2), taking into account the views of the Group and noting the difficulty of scheduling the meeting so as to provide sufficient time for delegations to prepare and submit documents and taking into account document deadlines, as well as other scheduled IMO meetings, meetings of UNFCCC, and the availability of the Main Hall at the Organization's Headquarters.

7.19 Consequently, the Committee agreed that ISWG-GHG 2 would take place from 23 to 27 October 2017. In order to provide sufficient time to prepare contributions, the document submission deadline was set for 22 September 2017.

7.20 The Committee also considered the issue of submission of documents to ISWG-GHG 3 and MEPC 72, which were scheduled to be held back-to-back. The Committee noted that documents submitted to MEPC 72 could be considered by ISWG-GHG 3 along with those documents submitted directly to the intersessional meeting, without the need of having duplicate submissions to both meetings, and that ISWG-GHG 3 could consider which documents submitted to the ISWG should be further considered by MEPC 72. In this regard, the Committee noted the view of one delegation that not all Member States attending the Committee had been represented at the intersessional working group meeting.

Establishment of a working group

7.21 The Committee considered the draft terms of reference for the Working Group on Reduction of GHG emissions of ships to be established at this session, as set out in paragraph 39 of document MEPC 71/WP.5. Recognizing the need to achieve concrete outcomes, with a view to the adoption of the initial IMO GHG Strategy at MEPC 72, in accordance with the approved Roadmap, the Committee agreed to add to the terms of reference the development of a draft outline for the structure of the initial Strategy.

7.22 The Committee noted that in particular document ISWG-GHG 1/2/7 (Singapore) had received support and agreed that it should be considered further by the Working Group.

7.23 The Committee established the Working Group on Reduction of GHG emissions from ships and instructed it, taking into account the comments and decisions made in plenary and documents MEPC 69/6/6, MEPC 71/7, MEPC 71/7/1, MEPC 71/7/2, MEPC 71/7/3, MEPC 71/7/4, MEPC 71/7/5, MEPC 71/7/6, MEPC 71/7/7, MEPC 71/7/8, MEPC 71/7/9, MEPC 71/7/10, MEPC 71/7/11, MEPC 71/7/12, MEPC 71/7/13, MEPC 71/7/14, MEPC 71/INF.23, MEPC 71/INF.34, MEPC 71/INF.35, ISWG-GHG 1/2/7, and on the basis of the work of ISWG-GHG 1 (MEPC 71/WP.5), to:

.1 develop an outline for the structure of the draft initial IMO Strategy on reduction of GHG emissions from ships;

.2 further consider how to progress the matter of reduction of GHG emissions from ships and advise the Committee as appropriate; and

.3 prepare draft terms of reference for the second and third meetings of the Intersessional Working Group on reduction of GHG emissions from ships.

Report of the Working Group

7.24 Having considered the report of the Working Group (MEPC 71/WP.7), the Committee approved it in general and took action as indicated hereunder.

Draft outline of the structure of the initial IMO GHG Strategy

7.25 The Committee noted the draft outline of the structure of the initial IMO Strategy on reduction of GHG emissions from ships (MEPC 71/WP.7, annex 1), as follows:

"1 Preamble/introduction/context including emission scenarios

2 Vision

3 Levels of ambition
Guiding principles

4 List of candidate short-, mid- and long-term further measures with possible timelines and their impacts on States

5 Barriers and supportive measures; capacity building and technical cooperation; R&D

6 Follow-up actions towards the development of the revised Strategy

7 Periodic review of the Strategy"

Terms of reference for ISWG-GHG 2 and ISWG-GHG 3

7.26 The Committee approved the terms of reference for the second and third meetings of the Intersessional Working Group on reduction of GHG emissions from ships, as follows:

.1 Terms of reference for ISWG-GHG 2

The Working Group on Reduction of GHG emissions from ships is instructed, taking into account the comments and decisions made in plenary and the documents submitted (MEPC 69/6/6, MEPC 71/7, MEPC 71/7/1, MEPC 71/7/2, MEPC 71/7/3,

MEPC 71/7/4, MEPC 71/7/5, MEPC 71/7/6, MEPC 71/7/7, MEPC 71/7/8, MEPC 71/7/9, MEPC 71/7/10, MEPC 71/7/11, MEPC 71/7/12, MEPC 71/7/13, MEPC 71/7/14, MEPC 71/INF.23, MEPC 71/INF.34, MEPC 71/INF.35, ISWG-GHG 1/2/7) and on the basis of the work of ISWG-GHG 1 (MEPC 71/WP.5) and the Working Group at MEPC 71 (MEPC 71/WP.7), to:

.1 further develop the structure and identify core elements of the draft initial IMO Strategy on reduction of GHG emissions from ships;

.2 develop draft text for inclusion in the initial Strategy;

.3 further consider how to progress the matter of reduction of GHG emissions from ships and advise the Committee as appropriate; and

.4 submit a report to MEPC 72.

.2 Terms of reference for ISWG-GHG 3

The Working Group on Reduction of GHG emissions from ships was instructed, taking into account the comments and decisions made in plenary and the documents submitted, and on the basis of the work of ISWG-GHG 2 (MEPC 72/7), to:

.1 finalize the draft initial IMO Strategy on reduction of GHG emissions from ships;

.2 further consider how to progress the matter of reduction of GHG emissions from ships and advise the Committee as appropriate; and

.3 submit a report to MEPC 72.

7.27 In conclusion, the Committee welcomed the progress achieved at the first intersessional meeting and this session, and invited Member States and international organizations to continue this work in a constructive and efficient manner at the two forthcoming intersessional meetings, with a view to the adoption of the initial IMO GHG Strategy at MEPC 72.

7.28 The delegation of the Bahamas, supported by several other delegations, expressed the view that the development of a vision statement for the reduction of GHG emissions from international shipping should be the first step and the highest priority for the intersessional work.

Scheduling of ISWG-GHG 3

7.29 Recalling that ISWG-GHG 3 was scheduled to take place during the week before MEPC 72, the Committee noted that that week included a United Kingdom holiday (Easter Monday on 2 April 2018) and, therefore, agreed that this would be a four-day meeting held from 3 to 6 April 2018.

8 IDENTIFICATION AND PROTECTION OF SPECIAL AREAS AND PSSAS

Designation of the Tubbataha Reefs Natural Park as a PSSA

8.1 The Committee recalled that MEPC 69 approved, in principle, the designation of the Tubbataha Reefs Natural Park (TRNP) in the Sulu Sea as a Particularly Sensitive Sea Area (PSSA) as proposed by the Philippines (MEPC 69/8), and invited the Philippines to submit detailed proposals for Associated Protective Measures (APMs) to NCSR 4 for consideration.

8.2 In considering document MEPC 71/8 (Secretariat), which reported on the outcome of NCSR 4 on the matter, the Committee noted that NCSR 4 had approved the establishment of an area to be avoided (ATBA) named the "Tubbataha Reefs Natural Park Particularly Sensitive Sea Area (PSSA) in the Sulu Sea" as an APM (NCSR 4/29, annex 2), with a view to adoption by MSC 98. The Committee also noted that MSC 98 had adopted the recommendation by NCSR 4 for the new ATBA to be implemented on 1 January 2018 at 0000 hours UTC.

8.3 The Committee further noted that the ATBA would serve as the APM for the TRNP PSSA, following formal designation of the PSSA by the Committee. The objective was to reduce the risk of ship groundings in the TRNP including the resulting marine pollution, prevent damage to the fragile coral reef ecosystem and ensure the sustainability of local artisanal fisheries.

8.4 The Committee noted a statement by the delegation of the Philippines, the full text of which is set out in annex 29, and, in particular, that the ATBA adopted by MSC 98 was a recommendatory measure; that the Philippines would establish a monitoring programme to evaluate the effectiveness of the PSSA; and that the designation of the TRNP as a PSSA would contribute to the implementation of SDG 14.

8.5 Consequently, the Committee instructed the Technical Group on PSSAs to review the information provided in document MEPC 71/8 and, taking into account comments made in plenary, prepare a draft MEPC resolution to designate the Tubbataha Reefs Natural Park as a PSSA.

Designation of Pulau Kukup (Kukup Island) and Tanjung Piai (Cape Piai) as a PSSA

8.6 The Committee considered documents MEPC 71/8/1 and MEPC 71/INF.24 (Malaysia), proposing to designate the Pulau Kukup (Kukup Island) and Tanjung Piai (Cape Piai) parks (PK-TP), located at the southern tip of Peninsular Malaysia in the Straits of Malacca and Singapore (SOMS) as a PSSA. The Committee noted that the PK-TP was described in the documents as a marine area with significant environmental, ecological, economic and cultural attributes that were seriously threatened by increasing pressures from international shipping in the SOMS. The area is unique for its extensive mangroves and intertidal mudflats which support significant fisheries, aquaculture and tourism sectors.

8.7 The Committee also noted that document MEPC 71/INF.24 provided an overview of the environmental, ecological, economic and cultural attributes of the PK-TP area and that the proposal included the establishment of two APMs i.e. area to be avoided and mandatory no anchoring area, aimed at preventing damage to the wetlands ecosystem and to ensure the sustainability of the local tourism and fishery sectors. The proposed APMs would be submitted to NCSR 5 (February 2018) for consideration with a view to final approval by MSC 99 (May 2018).

8.8 In the ensuing discussion, many delegations expressed their support for the proposal to designate PK-TP as a PSSA; however, it was noted that the proposal did not contain a detailed draft submission to NCSR for the APMs as required by paragraph 7.5.2.2 of the revised PSSA Guidelines and that this was essential to evaluate the effects on navigation in the SOMS.

8.9 The Committee noted the delegation of Indonesia's strong reservation to the Malaysian proposal to designate PK-TP as a PSSA, owing to the fact that the proposed PSSA coincided with an area currently under bilateral maritime boundary negotiation between Indonesia and Malaysia. The Committee also noted the view of the delegation of Indonesia that marine areas which were under or near maritime boundary disputes should not be proposed for PSSA designation.

8.10 The Committee, having considered all comments made, agreed to forward the proposal to the Technical Group for review.

Marine park in the Archipelago of Juan Fernandez

8.11 The Committee noted that Chile had made voluntary commitments, at the recent Ocean Conference, focusing on the protection and conservation of marine ecosystems with a view to establishing a marine park in the Archipelago of Juan Fernandez. The park would extend an existing marine reserve near Cape Horn by approximately 100,000 km^2, bringing the total protected marine areas in Chile to 1 million km^2, thereby minimizing pollution of the oceans and protecting endemic species.

Protection of the Lombok Strait

8.12 The Committee also noted document MEPC 71/INF.39 (Indonesia) regarding the protection of the Lombok Strait, including the Gili Islands and Nusa Penida Islands, highlighting the need to protect the islands which lay in close proximity to international shipping routes in the Lombok Strait, Indonesian Archipelagic Sea Lane (IASL) II, located between Lombok and Bali Islands.

Establishment of the Technical Group on PSSAs

8.13 Subsequently, the Committee established a Technical Group on PSSAs with the following terms of reference:

.1 review the information provided in document MEPC 71/8 and, taking into account comments made in plenary, prepare a draft MEPC resolution with a view to designating the "Tubbataha Reefs Natural Park (TRNP) in the Sulu Sea" as a PSSA; and

.2 review the proposal by Malaysia to designate the Pulau Kukup (Kukup Island) and Tanjung Piai (Cape Piai) parks as a PSSA (MEPC 71/8/1 and MEPC 71/INF.24), with a view to assessing whether it meets the provisions of the Revised PSSA Guidelines (resolution A.982(24), as amended by resolution MEPC.267(68)) and whether all the information required by the *Guidance document for submission of PSSA proposals to IMO* (MEPC.1/Circ.510) has been provided and advise the Committee on action as appropriate.

Report of the Technical Group on PSSAs

8.14 The Committee considered the report of the Technical Group (MEPC 71/WP.10), approved it in general and took action as described in the following paragraphs.

8.15 The Committee adopted resolution MEPC.294(71) on *Designation of the Tubbataha Reefs Natural Park as a Particularly Sensitive Sea Area*, as set out in annex 18.

8.16 Having considered the Group's discussion regarding the proposal to designate PK-TP as a PSSA (MECP 71/WP.10, paragraphs 5 to 11), the Committee:

.1 noted Malaysia's consultations with user States of the SOMS, other littoral States, the shipping industry and other stakeholders, conducted through the Cooperative Mechanism, the Tripartite Technical Experts Group, as well as through the IMO-Norad PSSA Project since 2014;

.2 noted that further information was being prepared by Malaysia on traffic risk assessment which included wave modelling, hydrographic survey, etc. near and through the proposed PSSA;

.3 having noted the delegation of Indonesia's strong reservation to the Malaysian proposal to designate PK-TP as a PSSA (see also paragraph 8.9), agreed not to review the proposal and recommended that Malaysia and Indonesia addressed the reservation prior to any re-submission to the Committee at a future date;

.4 noted that the proposal did not include a draft submission to NCSR and recommended that any future submissions should abide by the revised PSSA Guidelines;

.5 noted the intention of Malaysia to submit a proposal for the establishment of an ATBA and MNAA in the vicinity of PK-TP to NCSR 5 (2018); and

.6 encouraged Malaysia to continue to consult the other littoral States and relevant stakeholders at the appropriate forums, in particular on the possible impact of the safety and efficiency of navigation in the TSS of the SOMS, before submitting their proposal to a future session of the NCSR Sub-Committee.

8.17 The Committee noted statements by the delegations of Malaysia, Indonesia and Singapore, made in that order, as set out in annex 29.

9 POLLUTION PREVENTION AND RESPONSE

Outcome of PPR 4

9.1 The Committee approved, in general, the report of the fourth session of the Sub-Committee on Pollution Prevention and Response (PPR) (PPR 4/21, PPR 4/21/Add.1, PPR 4/21/Add.2 and PPR 4/21/Add.3) and took action as indicated hereunder.

9.2 The Committee noted that, of the action requested of it by PPR 4, as listed in paragraph 2 of document MEPC 71/9 (Secretariat):

.1 points .6 to .10 and .15, concerning ballast water management, had been dealt with under agenda item 4 (see paragraphs 4.52 to 4.60);

.2 points .11, .12 and .17, concerning air pollution prevention, together with commenting documents MEPC 71/9/1, MEPC 71/9/3, MEPC 71/9/7 and MEPC 71/INF.19, had been dealt with under agenda item 5 (see paragraphs 5.2 to 5.10); and

.3 points .13 and .18 to .24, concerning the work programme of the Sub-Committee, together with commenting documents MEPC 71/9/2, MEPC 71/9/4, MEPC 71/9/5, MEPC 71/9/6 and Corr.1, MEPC 71/9/8, MEPC 71/9/9 and MEPC 71/INF.21, had been dealt with under agenda item 14 (see paragraphs 14.29, 14.31 and 14.32, 14.44.1, 14.16 to 14.19 and 14.20 to 14.28, respectively).

Categorization of liquid substances

Evaluation of products

9.3 The Committee endorsed the evaluation of products and their respective inclusion in lists 1 and 3 of MEPC.2/Circ.22 on *Provisional categorization of liquid substances in accordance with MARPOL Annex II and the IBC Code* with validity for all countries and with no expiry date.

Evaluation of cleaning additives

9.4 The Committee endorsed the evaluation of cleaning additives and their inclusion in MEPC.2/Circ.22 and its successor MEPC.2/Circ.23 (to be issued in December 2017).

Revised chapter 21 of the IBC Code

9.5 The Committee, having noted the concurrent decision of MSC 98, approved, in principle, the draft revised chapter 21 of the IBC Code (PPR 4/21, annex 1), pending finalization of the revision of chapters 17 and 18 of the Code, for subsequent circulation of all three revised chapters, with a view to adoption.

OSV Chemical Code

9.6 The Committee noted that MSC 98 had approved the draft Assembly resolution on the Code for the transport and handling of hazardous and noxious liquid substances in bulk on offshore support vessels (OSV Chemical Code) with further modifications to paragraphs 1.2.21, 2.1.5, 2.7.4, 2.7.6 and 3.1.1 of the draft Code (MSC 98/23, paragraph 8.5 and annex 11).

9.7 In considering the draft OSV Chemical Code, the Committee agreed to delete the words "only those offshore related" at the beginning of paragraph 1.1.9.1 for reasons of clarity and invited MSC 99 to note this further modification.

9.8 Subsequently, the Committee approved the draft Assembly resolution on the Code for the transport and handling of hazardous and noxious liquid substances in bulk on offshore support vessels (OSV Chemical Code), with the modifications agreed by MSC 98 as well as the further modification described in paragraph 9.7, as set out in annex 19, for submission to A 30, with a view to adoption.

OPRC Model Training Courses

9.9 The Committee approved OPRC model training courses, as set out in documents PPR 4/21/Add.2 and PPR 4/21/Add.3 (PPR 4/21, annex 7), and requested the Secretariat to carry out final editing and publish the courses through the IMO Publishing Service.

Unified interpretation of MARPOL Annex I

9.10 The Committee approved a unified interpretation of regulation 36.2.10 of MARPOL Annex I concerning the appropriate cargo/ballast operation category of offshore terminal line flush seawater, as set out in annex 20, for dissemination as MEPC.1/Circ.872 (see also paragraph 10.7).

10 REPORTS OF OTHER SUB-COMMITTEES

Outcome of CCC 3

10.1 The Committee approved, in general, the report of the third session of the Sub-Committee on Carriage of Cargoes and Containers (CCC) (CCC 3/15 and MEPC 71/10) and took action as indicated hereunder.

Draft amendments to the IMSBC Code

10.2 The Committee, having considered the request of CCC 3 to endorse the draft amendments to the IMSBC Code related to substances that are harmful to the marine environment (HME) and to forward any comments to MSC 98, noted that this requested action had been overtaken by events and that MSC 98 had adopted the amendments to the IMSBC Code, including the amendments regarding HME substances, which were also related to MARPOL Annex V (MSC 98/23, paragraph 3.74 and annex 8).

Draft revised Guidelines for the implementation of MARPOL Annex V

10.3 The Committee recalled that:

.1 MEPC 69 had approved draft amendments to MARPOL Annex V related to HME substances prepared by CCC 2, and instructed CCC 3 to finalize draft amendments to the *2012 Guidelines for the implementation of MARPOL Annex V* (2012 Guidelines) (resolution MEPC.219(63)), with a view to ensuring that they were brought in line with the aforementioned amendments to MARPOL Annex V;

.2 MEPC 70 had adopted, by resolution MEPC.277(70), amendments to MARPOL Annex V related to HME substances and the Form of Garbage Record Book; and

.3 MEPC 70 had also agreed to address the definition of E-waste along with other consequential modifications arising from the amendments, through amendments to the 2012 Guidelines and had requested the Secretariat to prepare a draft revision of the Guidelines for consideration at this session.

10.4 Following discussion of the draft revised Guidelines set out in the annex to document MEPC 71/16 (Secretariat), the Committee:

.1 invited the delegation of Finland to forward their editorial changes to the draft 2017 Guidelines directly to the Secretariat for inclusion in the final text;

.2 agreed to the following additional text for inclusion in the fifth preambular paragraph of the associated draft MEPC resolution:

"and relevant requirements of the International Code for ships operating in polar waters (Polar Code), as adopted by resolution MEPC.264(68),";

.3 agreed to replace the word "product" in paragraph 1.6.2 of the draft 2017 Guidelines (definition of E-waste) with the word "equipment", concurring that the definition was for the purpose of the Guidelines only, noting ongoing discussions on the definition of E-waste in other bodies, including the Basel Convention; and

.4 regarding a suggestion to include the aforementioned definition of "E-waste", also in MARPOL Annex V, concluded that this would constitute an amendment to the Annex which would require a proposal for a new output, in accordance with the Committee's method of work.

10.5 Having agreed to the changes described in paragraph 10.4 above and having noted that the HME-related amendments developed by CCC 3 had already been incorporated by the Secretariat, the Committee adopted resolution MEPC.295(71) on *2017 Guidelines for the implementation of MARPOL Annex V*, as set out in annex 21, revoking the 2012 Guidelines.

Outcome of SDC 4

Draft unified interpretation of regulation 1.23 of MARPOL Annex I

10.6 The Committee considered the action requested of it by SDC 4 (MEPC 71/10/1, paragraph 2) concerning a unified interpretation of regulation 1.23 of MARPOL Annex I.

10.7 In this regard, having noted that MSC 98 had approved the corresponding *Unified interpretation of SOLAS regulations II-1/2.20 and II-2/3.21* (MSC.1/Circ.1573) regarding the use of even-keel hydrostatics for determination of the regulatory deadweight to be entered on relevant statutory certificates (MSC 98/23, paragraph 10.18), the Committee approved a unified interpretation of regulation 1.23 of MARPOL Annex I, as set out in annex 20, for dissemination as MEPC.1/Circ.872 (see also paragraph 9.10).

11 TECHNICAL COOPERATION ACTIVITIES FOR THE PROTECTION OF THE MARINE ENVIRONMENT

Thematic priorities for the ITCP for the 2018-2019 biennium

11.1 The Committee noted the information provided in document MEPC 71/11 (Secretariat) related to thematic priorities for the Integrated Technical Cooperation Programme (ITCP) for the 2018-2019 biennium, in particular that the Secretariat, to facilitate the work of the Committee, had selected five thematic priorities related to the protection of the marine environment for the 2018-2019 biennium, covering pollution prevention and response, protection of marine biodiversity and prevention of pollution by dumping of wastes and other matters, as set out in the annex to the document.

11.2 The Committee, having considered the proposed thematic priorities, approved them as follows:

.1 Assisting countries with the implementation of the MARPOL Convention and related instruments, in particular energy efficiency measures for ships, the consistent implementation of the 0.50% sulphur limit, the environmental requirements of the Polar Code as well as requirements for waste management, port reception facilities and Special Areas and PSSAs.

.2 Strengthening national and regional capacity and fostering regional cooperation for effective and consistent implementation of the BWM and AFS Conventions and the Biofouling Guidelines.

.3 Strengthening national and regional capacity and fostering regional cooperation for the ratification and effective implementation of the Hong Kong Convention on Ship Recycling.

.4 Assisting countries with the implementation of the OPRC Convention and the OPRC-HNS Protocol and enhancing regional cooperation in marine pollution preparedness, response and cooperation, as well as addressing aspects of the implementation of the relevant international regimes on liability and compensation for oil and HNS pollution damage.

.5 Assisting countries through building capacity with the ratification and implementation of the 1996 Protocol to the International Convention on the Prevention of Marine Pollution by Dumping of Waste and Other Matters (London Protocol).

Technical cooperation activities related to the protection of the marine environment

11.3 The Committee noted the information provided in the following documents:

.1 MEPC 71/11/1 (Secretariat) on the Organization's technical cooperation activities related to the protection of the marine environment implemented between 23 July 2016 and 31 March 2017 under the ITCP, as well as under major projects financed through external sources. The Committee noted in particular that these activities were aimed at assisting Member States in the implementation of the provisions of relevant IMO Conventions (AFS, BWM, MARPOL, OPRC, OPRC-HNS, Ship Recycling), also including the London Protocol; and that several regional organizations partnered with the Secretariat and contributed towards the implementation of these activities, including BSC, CPPS, PEMSEA, PERSGA, RAC-REMPEITC-Caribe, REMPEC, ROPME, SACEP and SPREP, among others; and

.2 MEPC 71/11/2 (Secretariat) on additional activities implemented between 1 July 2016 to 31 March 2017 with support from REMPEC, related to the implementation of the Protocol to the Barcelona Convention concerning cooperation in preventing pollution from ships and, in case of emergency, combating pollution of the Mediterranean Sea.

11.4 The Committee also noted that, during the period under review, significant progress had been achieved in executing a number of projects financed mainly by external sources and implemented under the direct supervision of the Marine Environment Division, in particular regarding the establishment of Maritime Technology Cooperation Centres (MTCC) in five

developing regions with funding support from the European Union in the framework of the Global MTCC Network (GMN) project. The Committee also took note that the five regional MTCCs would be hosted by institutions in China, Fiji, Kenya, Panama and Trinidad and Tobago to support the Asian, Pacific, African, Latin American and Caribbean regions, respectively. The Committee also noted with appreciation the significant financial contribution made by the European Union to this project.

11.5 The Committee also noted that the launch of the MTCC-Latin America would take place on 4 October 2017, coinciding with the events commemorating the centenary of the Panamanian Ship Registry. A statement by the delegation of Panama in this regard is set out in annex 29.

11.6 Several delegations expressed their appreciation for the IMO-Norad projects and especially the project that provided technical assistance to East Asian countries in ratifying and implementing IMO instruments for the protection of the marine environment, requesting that the Secretariat and Norad discuss continued cooperation in this area, with a view to support the future plan of action as agreed by the project beneficiary countries during their final regional meeting held in Bali, Indonesia, in November 2016.

11.7 Several delegations also expressed their appreciation for the GEF-UNDP-IMO GloMEEP Project and urged the Secretariat to pursue a follow-up phase of the current project and to increase the geographical scope owing to the increasing need by developing countries, especially by SIDS/LDCs, for technical assistance with the implementation of MARPOL Annex VI. The Committee also noted with appreciation the establishment of the Global Industry Alliance (GIA) to support low-carbon shipping within the framework of the GloMEEP project and requested to be regularly updated on the outcome of the GIA activities.

11.8 The Committee noted that the GEF-UNDP-IMO GloBallast Programme had ended on 30 June 2017 and recognized with appreciation the significant contribution the programme had made to assist developing countries to prepare for and implement the Ballast Water Management Convention. The Committee expressed its appreciation to the Global Environment Facility (GEF), UNDP and the Secretariat, in particular the programme coordination unit of the Marine Environment Division, for the support over the past 17 years. The Committee noted, with appreciation, the offer of the observer from IMarEST to continue to organize the GloBallast R&D forum series in partnership with the Secretariat, so that this highly beneficial global information exchange forum could be sustained. The statement by the observer from IMarEST is set out in annex 29.

11.9 The Committee further noted that the Secretariat had secured funding from the GEF to prepare a full-scale project document for a global technical cooperation project aimed at assisting with the implementation of the *Guidelines for the control and management of ships' biofouling* and that any interested Member States wishing to participate in the project should express their interest to the Secretariat[6] during the project preparation phase.

11.10 The delegation of the Islamic Republic of Iran suggested that, in allocating IMO's ITCP resources to the Asia/Pacific region, owing to its large geographical coverage, consideration should be given to either redefining the coverage for the purposes of technical cooperation or adjusting the allocation of sufficient resources to the region and further requested that the Committee bring this suggestion to the attention of the Technical Cooperation Committee.

[6] **Contact details:**
Mr. Jose Matheickal, Deputy Director, MED, email: jmatheic@imo.org

11.11 The Committee took note of the information provided by the delegation of Singapore that the joint IMO-Singapore Conference on Future-Ready Shipping (FRS-2017) would be held in Singapore from 25 to 26 September 2017.

11.12 The Committee also took note of the information provided by the delegation of Malta that a celebratory event, marking the 40th anniversary of REMPEC, had been held in Malta in October 2016, which had served as a strong manifestation of support for REMPEC's achievements. The statement by the delegation of Malta is set out in annex 29.

11.13 The Chair recalled that the constituent programmes of the ITCP could only be delivered if the required funding was secured from internal resources and/or external donor contributions; expressed appreciation for all financial and in-kind contributions to the ITCP and major projects; and invited Member States and international organizations to continue and, if possible, increase their support for the Organization's technical cooperation activities so that successful delivery of the programme could be achieved.

12 CAPACITY BUILDING FOR THE IMPLEMENTATION OF NEW MEASURES

12.1 The Committee recalled that MEPC 70 (MEPC 70/18, paragraph 12.5) had requested the Vice-Chair of the Committee, in consultation with the Chair and assisted by the Secretariat, to submit to this session a preliminary assessment of the capacity-building implications and technical assistance needs related to the amendments to mandatory instruments and to outputs related to mandatory instruments that had been approved at MEPC 70.

12.2 The Committee considered document MEPC 71/12 (Vice-Chair), providing the outcome of the preliminary assessment referred to above and noted that the item in annex 2 of the document related to amendments to mandatory instruments had been found to have some capacity-building implications, in particular with regard to the designation of the Baltic Sea and the North Sea ECAs for NO_X Tier III control, but that these would depend on the type of technology selected in order to comply with the new requirements. No capacity-building implications were identified related to the information to be included in the bunker delivery note.

12.3 Having considered the assessment of the new output related to mandatory instruments approved at MEPC 70, concerning amendments to regulation 14 of MARPOL Annex VI (MEPC 71/12, annex 3), the Committee agreed that the necessary knowledge and guidance were already in place and, therefore, there were no significant capacity-building implications related to this new output.

12.4 The Committee, having agreed that it would not be necessary to establish the Ad Hoc Capacity-building Needs Analysis Group (ACAG), requested the Vice-Chair, in consultation with the Chair and with the assistance of the Secretariat, to submit to MEPC 72 a preliminary assessment of capacity-building implications or technical assistance needs related to amendments to mandatory instruments and new outputs related to proposed new measures approved at the current session.

13 APPLICATION OF THE COMMITTEES' GUIDELINES

Rules of Procedure of the Committee

13.1 The Committee recalled that MEPC 70 had approved revised Rules of Procedure of the Committee (MEPC 70/18, paragraph 14.4 and annex 14). In this regard, the Committee, having noted that LEG 104 and MSC 98 had also approved revised Rules of Procedure and, taking into account the request of the Council to harmonize the Rules of Procedure of the committees, agreed to modify rule 3 (concerning the minimum number of Member States

required to request an extraordinary session) and rule 34.1 (concerning the minimum number of Member States required to constitute a quorum) of the Rules of Procedure of the MEPC, approved at MEPC 70, as follows, in line with the decisions of LEG 104 and MSC 98:

.1 the minimum number of Member States required to request an extraordinary session in rule 3 was changed from 15 to 20; and

.2 rule 34.1 was revised to read:

"The Chair may declare a meeting open and permit the debate to proceed when at least 25% of the Membership of the Organization are present. The presence of at least 25% of the Membership of the Organization, or other participants, as appropriate, shall be required for any decision to be taken."

13.2 In this connection, the Committee also agreed, in line with the decisions of LEG 104 and MSC 98, that the holding of an extraordinary session with budgetary implications should be subject to the approval of the Council.

13.3 Consequently, the Committee approved the revised *Rules of Procedure of the MEPC,* as set out in annex 22.

Committees' method of work

13.4 The Committee also recalled that MEPC 70 had approved the revised Committees' Guidelines and noted that they had been concurrently approved by MSC 97 and had subsequently been issued as MSC-MEPC.1/Circ.5 on *Organization and method of work of the Maritime Safety Committee and the Marine Environment Protection Committee and their subsidiary bodies*.

14 WORK PROGRAMME OF THE COMMITTEE AND SUBSIDIARY BODIES

Proposals for new outputs

14.1 The Committee took into account the provisions of the Committees' method of work (MSC-MEPC.1/Circ.5) and of the *Application of the Strategic Plan and the High-level Action Plan of the Organization* (resolution A.1099(29)) when assessing the proposals for new outputs submitted to this session. In this regard, the Committee noted in particular that A 29, in resolution A.1099(29), had directed that the normal action for accepted outputs should be their placement on the post-biennial agenda of the Committee.

Amendment to Annex 1 to the AFS Convention

14.2 The Committee considered document MEPC 71/14 (Austria et al.), proposing a new output to amend Annex 1 to the International Convention on the Control of Harmful Anti-Fouling Systems on Ships (AFS) Convention, 2001, to include controls on cybutryne, together with the Chair's preliminary assessment of the proposal (MEPC 71/WP.4, annex 2).

14.3 Having discussed the proposal, in accordance with the "Process for proposing amendments to controls on anti-fouling systems" stipulated in Article 6 of the AFS Convention, the Committee agreed to include a new output on "Consideration of the initial proposal to amend Annex 1 to the AFS Convention to include controls on cybutryne" in the PPR Sub-Committee's biennial agenda for 2018-2019 and the provisional agenda for PPR 5, with a target completion year of 2018. The Committee also invited the co-sponsors of document MEPC 71/14 to submit their initial proposal, containing information as required in Annex 2 to the Convention, to PPR 5.

Amendments to the 2013 Guidelines for the Designation of Special Areas under MARPOL

14.4 The Committee considered document MEPC 71/14/1 (Russian Federation), proposing a new output to amend the *2013 Guidelines for the Designation of Special Areas under MARPOL* (resolution A.1087(28)) to establish a requirement to regularly evaluate the effectiveness of measures introduced in Special Areas, together with the Chair's preliminary assessment of the proposal (MEPC 71/WP.4, annex 2).

14.5 In the ensuing discussion, some delegations expressed support for the proposal whilst the majority of delegations that spoke did not consider it necessary to introduce regular reviews to evaluate the effectiveness or efficiency of special areas and were of the view that the proposed timeframe was insufficient for a meaningful assessment; would cause unnecessary administrative burdens; and might act as a deterrent for proposing new special areas.

14.6 Consequently, the Committee did not approve the proposal for the new output but invited interested Member States to submit, on a voluntary basis, information on their evaluation of the effectiveness of existing protective measures in special areas to future sessions of the Committee.

Revision of the 2012 Guidelines on implementation of effluent standards and performance tests for sewage treatment plants

14.7 The Committee had for its consideration the following documents:

.1 MEPC 71/14/2 (Norway), proposing a new output to amend the *2012 Guidelines on implementation of effluent standards and performance tests for sewage treatment plants* (resolution MEPC.227(64), as amended by resolution MEPC.284(70)) to reduce inconsistencies in the application of the Guidelines; and

.2 MEPC 71/INF.22 (Netherlands), providing updated information on the malfunctioning of type approved sewage treatment plants installed on board ships as well as observations on possible causes of malfunctioning,

together with the Chair's preliminary assessment of the proposal (MEPC 71/WP.4, annex 2).

14.8 Following discussion, having noted support for the proposal, the Committee agreed to include a new output on "Amendments to the *2012 Guidelines on implementation of effluent standards and performance tests for sewage treatment plants* (resolution MEPC.227(64)) to address inconsistencies in their application" in the post-biennial agenda of the Committee, assigning the PPR Sub-Committee as the associated organ, with two sessions needed to complete the work.

14.9 Having noted the desire of some Member States for the PPR Sub-Committee to start the work at the earliest possibility, the Committee requested the Secretariat, in consultation with the Chair of the Sub-Committee, to assess the possibility to include this new output in the agenda for PPR 6, taking into account the workload of the Sub-Committee after PPR 5.

Amendments to the definition of "person" in MARPOL Annex IV

14.10 The Committee 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, together with the Chair's preliminary assessment of the proposal (MEPC 71/WP.4, annex 2).

14.11 Having noted ongoing related work in the MSC, in particular 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, the Committee agreed to keep the proposal in abeyance until the results of MSC's work were available.

Measures to reduce risks of use and carriage of heavy fuel oil in the Arctic

14.12 The Committee had for its consideration the following documents:

.1 MEPC 71/14/4 (Canada et al.), proposing a new output for the development of measures to reduce risks of use and carriage of heavy fuel oil (HFO) as fuel by ships in Arctic waters;

.2 MEPC 71/16/4 (FOEI et al.), highlighting recent developments regarding the future of Arctic shipping and the comparative costs of using HFO versus alternative fuels;

.3 MEPC 71/16/8 (Russian Federation), commenting on document MEPC 71/16/4, in particular on those parts relating to the use of HFO and its alternatives in Arctic waters;

.4 MEPC 71/INF.36 (FOEI et al.) on economic and environmental trade-offs of using alternative fuels (distillate and LNG) instead of HFO in the Arctic; and

.5 MEPC 71/INF.37 (FOEI et al.), summarizing the key findings of a new report on the use and carriage of HFO and black carbon emissions from ships in the Arctic in 2015 and projections for 2020 and 2025,

together with the Chair's preliminary assessment of the proposal (MEPC 71/WP.4, annex 2).

14.13 Having considered the proposal, the Committee:

.1 agreed to include a new output on "Development of measures to reduce risks of use and carriage of heavy fuel oil as fuel by ships in Arctic waters" in the 2018-2019 biennial agenda of the Committee, assigning the PPR Sub-Committee as the associated organ, with two sessions needed to complete the work;

.2 invited concrete proposals on what type of measures should be developed, including the scope of the work on the new output, to MEPC 72 for consideration, with a view to giving clear instructions to PPR 6 to start the work, and consequently included the item in the agenda of MEPC 72 for the above purpose only; and

.3 agreed that a decision would be made by the Committee in the future on the mandatory or recommendatory nature of the measures, after detailed consideration of such proposed measures.

Amendments to chapter 4 of MARPOL Annex VI

14.14 The Committee considered document MEPC 71/14/5 (Republic of Korea), proposing a new output to develop amendments to chapter 4 of MARPOL Annex VI in relation to the exemption of ships that were not normally engaged on international voyages, but were expected to undertake a single international voyage in exceptional circumstances, together with the Chair's preliminary assessment of the proposal (MEPC 71/WP.4, annex 2).

14.15 Having considered the proposal, the Committee agreed to include a new output on "Development of amendments to regulation 19 of MARPOL Annex VI and an associated Exemption Certificate for the exemption of ships not normally engaged on international voyages" in the post-biennial agenda of the Committee, assigning the III Sub-Committee as the associated organ, with two sessions needed to complete the work.

Use of more than one Engine Operational Profiles (Maps)

14.16 The Committee recalled that MEPC 69, having considered document MEPC 69/19/1 (Norway), proposing the development of guidelines for the use of more than one Engine Operational Profile (Maps), together with commenting documents MEPC 69/19/3 (EUROMOT) and MEPC 69/19/4 (United States), had referred the proposal to PPR 4 for detailed consideration and advice, so that an informed decision with regard to the proposed new output could be taken at this session.

14.17 The Committee noted that PPR 4 had prepared a draft definition of "Engine Operational Profile (Map)" for the purposes of the NO_X Technical Code 2008 (PPR 4/21, paragraph 20.12) and had invited it to approve a new output on "Development of amendments to MARPOL Annex VI and the NO_X Technical Code on the use of multiple engine operational profiles (Maps) for marine diesel engines", including a suggested scope of the work (PPR 4/21, paragraph 20.13).

14.18 In this regard, the Committee had for its consideration the following documents:

.1 MEPC 71/9/2 (EUROMOT), commenting on the draft definition of "Engine Operational Profile (Map)" prepared by PPR 4;

.2 MEPC 71/9/4 (United States), describing the marine diesel engine emission certification process under MARPOL Annex VI and the NO_X Technical Code 2008; explaining how and why multiple Maps were not currently allowed; and recommending a revision of the title of the output;

.3 MEPC 71/9/8 (Australia), commenting on documents MEPC 71/9/2 and MEPC 71/9/4 and supporting further consideration of using multiple Maps under the proposed new output; and

.4 MEPC 71/INF.21 (IACS), providing information to facilitate the Committee's consideration of using multiple Maps for marine diesel engines certified under MARPOL Annex VI and the NO_X Technical Code 2008,

together with the Chair's preliminary assessment of the proposal (MEPC 71/WP.4, annex 3).

14.19 Having noted the divergent views expressed, the Committee did not reach agreement with regard to the proposal and instead instructed the PPR Sub-Committee to further consider the title of the proposed new output and the associated scope of work, including the definition of "Map", taking into account documents MEPC 71/9/2, MEPC 71/9/4, MEPC 71/9/8 and MEPC 71/INF.21, and submit a revised proposal to MEPC 72, so that an informed decision on the inclusion of this matter as a new output could be taken at that session.

Consistent implementation of regulation 14.1.3 of MARPOL Annex VI

14.20 The Committee recalled that MEPC 70 had decided that the sulphur content limits for fuel oil in regulation 14.1.3 of MARPOL Annex VI (i.e. 0.50% m/m) should become effective on 1 January 2020.

14.21 The Committee recalled also that MEPC 70, in recognizing the concerns expressed regarding implementation of the sulphur limit provisions, had agreed to forward document MEPC 70/5/2 and relevant comments made in plenary to PPR 4 for further consideration and to draft a justification and scope for a new output on what additional measures might be developed to promote consistent implementation of the 0.50% global sulphur limit, for consideration at this session.

14.22 The Committee noted that PPR 4 had agreed to a draft justification and scope for a new output on "Consistent implementation of regulation 14.1.3 of MARPOL Annex VI", (PPR 4/21, annex 13), for approval at this session.

14.23 In this regard, the Committee had for its consideration the following documents:

.1 MEPC 71/9/5 (Belgium et al.), commenting on the scope of the proposed new output; providing information on the experience with the use of new fuel blends in SO_X-ECA_S; and proposing the development of guidance to address the fuel quality related to the implementation of the 0.50% m/m sulphur limit;

.2 MEPC 71/9/6 (Brazil and India), commenting on the proposed scope of the new output and proposing the inclusion of measures for gathering data with respect to the availability of required fuel oils to make transition plans effective; and

.3 MEPC 71/9/9 (Brazil et al.), commenting on the draft justification and scope for the proposed new output prepared by PPR 4 and stating changeover in sulphur content in marine fuel oils to 0.50% m/m would have an impact on operations and configuration of refineries,

together with the Chair's preliminary assessment of the proposal (MEPC 71/WP.4, annex 3).

14.24 In this connection, the Committee also noted information provided by the Secretariat on the outcome of MSC 98 concerning its consideration of safety aspects with regard to ships using low-flashpoint oil fuels, in particular that MSC 98:

.1 emphasized that the requirement in SOLAS chapter II-2 for the flashpoint of oil fuel remained at 60ºC for ships that did not comply with the International Code of Safety for Ships using Gases or other Low-flashpoint Fuels (IGF Code);

.2 reiterated that the use of oil fuel with a flashpoint below 60ºC was limited to ships that complied with the IGF Code, except as otherwise permitted by SOLAS regulation II-2/4.2.1;

.3 encouraged interested Member States and international organizations to submit proposals to the CCC Sub-Committee with a view to developing specific requirements for low-flashpoint oil fuel, within the context of the IGF Code only, under output 5.2.1.2 (Amendments to the IGF Code and development of guidelines for low-flashpoint fuels);

.4 invited MEPC 71, when considering the draft justification for the proposed new output developed by PPR 4, to explicitly add, in the scope of the proposed output, consideration of the safety implications relating to the option of blending fuels in order to meet the 0.50% m/m sulphur limit due to take effect on 1 January 2020; and

.5 instructed the PPR Sub-Committee to report to the MSC regarding any safety issues that might be identified with regard to low-sulphur oil fuel, subject to the aforementioned proposed output being approved by MEPC 71.

14.25 In the ensuing discussion, the Committee noted general support for the new output and the associated scope of the work, as developed by PPR 4, and for the development of guidance to address the fuel oil quality related to the implementation of the 0.50% m/m sulphur limit, as proposed in document MEPC 71/9/5, taking into account the Committee's work on the development of best practice for fuel oil purchasers/users, Member States/coastal States and the fuel oil supply industry (see section 5).

14.26 While a number of delegations expressed support for an additional element to be included in the scope of the new output, concerning collecting data with respect to the availability of required fuel oils to make transition plans effective, as proposed in document MEPC 71/9/6; and shared the concerns expressed in document MEPC 71/9/9; the majority of delegations that spoke were of the view that the scope of work developed by PPR 4 was adequate and an assessment of the fuel availability had been completed and subsequently approved by MEPC 70. Those delegations considered that the proposed additional element on data collection would be counterproductive, lead to uncertainty and potentially delay the preparation process, and that any transition period permitting exemptions from the requirement after 1 January 2020 would prevent a level playing field.

14.27 Following the discussion, the Committee:

.1 approved the new output on "Consistent implementation of regulation 14.1.3 of MARPOL Annex VI", for inclusion in the PPR Sub-Committee's biennial agenda for 2018-2019 and the provisional agenda for PPR 5, with a target completion year of 2019;

.2 approved the scope of the work as prepared by PPR 4 (PPR 4/21, annex 13, paragraph 13), including the additional item on safety implications relating to the option of blending fuels in order to meet the 0.50% m/m sulphur limit requested by MSC 98 (see paragraph 14.24.4);

.3 instructed the PPR Sub-Committee to report to MSC any safety issues that might be identified with regard to low-sulphur oil fuel;

.4 forwarded document MEPC 71/9/5 to PPR 5 for consideration, under the new output; and

.5 requested ISO to consider the framework of ISO 8217 with a view to ensuring consistency between the relevant ISO standards on marine fuel oils and the implementation of regulation 14.1.3 of MARPOL Annex VI.

14.28 Having concurred with the view of PPR 4 that intersessional work was required to complete the work on the new output, the Committee approved the holding of an intersessional meeting on consistent implementation of regulation 14.1.3 of MARPOL Annex VI, under the PPR Sub-Committee, in the second half of 2018, subject to endorsement by the Council (see paragraph 14.44.3); and instructed PPR 5 to prepare terms of reference for the above-mentioned intersessional meeting.

Sub-Committee on Pollution Prevention and Response (PPR)

Deletion of output from the biennial agenda

14.29 The Committee, having noted that no submissions had been received under the output "Improved and new technologies approved for Ballast Water Management systems and reduction of atmospheric pollution" for the last two consecutive sessions of the Sub-Committee, agreed to delete the output from its biennial agenda, in accordance with the provisions of the Committees' Organization and method of work (MSC-MEPC.1/Circ.5).

Revision of output title

14.30 The Committee recalled that, under agenda item 5, it had adopted the *2017 Guidelines addressing additional aspects to 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)) (see paragraph 5.8).

14.31 In this regard, having considered the relevant suggestion by PPR 4 to amend the title of the output (MEPC 71/9, paragraph 2.18), taking into consideration that Scheme A and Scheme B should be made equally applicable and that amendments to the NO_X Technical Code 2008 were required, the Committee agreed to amend the title of the output "Revision of the 2011 SCR Guidelines" to read "Revision of certification requirements for SCR systems under the NO_X Technical Code 2008".

Biennial agenda of the PPR Sub-Committee and provisional agenda for PPR 5

14.32 Consequently, having considered the biennial status report of the Sub-Committee for the current biennium and having taken into account the relevant decisions made at this session, the Committee approved the biennial agenda of the PPR Sub-Committee and the provisional agenda for PPR 5, as set out in annex 23.

Sub-Committee on Carriage of Cargoes and Containers (CCC)

Biennial agenda of the CCC Sub-Committee and provisional agenda for CCC 4

14.33 Having recalled that MSC 97 and MEPC 70 had approved the biennial agenda of the CCC Sub-Committee and the provisional agenda for CCC 4 (MEPC 70/18/Add.1, annex 16), which had been confirmed by MSC 98, the Committee concurrently confirmed both.

Sub-Committee on Implementation of IMO Instruments (III)

Biennial agenda of the III Sub-Committee and provisional agenda for III 4

14.34 Having recalled that MSC 97 and MEPC 70 had approved the biennial agenda of the III Sub-Committee and the provisional agenda for III 4 (MEPC 70/18/Add.1, annex 17), which had been confirmed by MSC 98, the Committee concurrently confirmed both.

Alignment of outputs of the MEPC for the 2018-2019 biennium with the new strategic directions approved by C 117

14.35 The Committee noted that C 117 had approved a new Vision Statement, setting out overarching principles to be taken into account in all of the Organization's work, and seven Strategic Directions (SDs) as follows:

.1 improve implementation;

.2 integrate new and advancing technologies in the regulatory framework;

.3 respond to climate change;

.4 engage in ocean governance;

.5 enhance global facilitation and security of international trade;

.6 ensure regulatory effectiveness; and

.7 ensure organizational effectiveness.

14.36 In this regard, the Committee considered document MEPC 71/14/6 (Secretariat), providing the alignment of the proposed outputs of the Committee for the 2018-2019 biennium with the aforementioned new SDs, as well as relevant information on the new strategic planning process.

14.37 Following consideration, the Committee approved the outputs of the Committee for the 2018-2019 biennium aligned to the new SDs approved by C 117, as set out in annex 24, and requested the Secretariat to review the outputs, taking into account the outcome of this session, in particular with regard to the proposals for new outputs, for submission to C 118 and make any necessary modifications as appropriate.

Status of outputs of the Committee for the 2016-2017 biennium

14.38 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 and the High-level Action Plan of the Organization* (resolution A.1099(29)), to avoid any unnecessary duplication of work, the Committee invited the Council to note the status report of the outputs of the MEPC for the 2016-2017 biennium, as set out in annex 25.

Items to be included in the agendas of MEPC 72 and MEPC 73

14.39 The Committee, having considered document MEPC 71/WP.3 and taken into account the decisions made at this session, approved the items to be included in the agendas of MEPC 72 and MEPC 73, as set out in annex 26.

14.40 In this regard, the Committee recalled that it had agreed to include in the agenda for MEPC 72 a new item on "Development of measures to reduce risks of use and carriage of heavy fuel oil as fuel by ships in Arctic waters" (see paragraph 14.13.2).

Tentative dates for MEPC 72 and MEPC 73

14.41 The Committee noted that MEPC 72 and MEPC 73 had been tentatively scheduled to take place from 9 to 13 April 2018 and from 22 to 26 October 2018, respectively.

Groups expected to be established at MEPC 72

14.42 The Committee, taking into account the decisions made under the respective agenda items, anticipated that the following groups might be established at MEPC 72:

.1 Working Group on Air pollution and energy efficiency;

.2 Working Group on Reduction of GHG emissions from ships;

.3 Drafting Group on Amendments to mandatory instruments;

.4 Ballast Water Review Group; and

.5 Technical Group on PSSAs.

Correspondence Groups

14.43 The Committee recalled that it had decided under the respective agenda items to establish the following intersessional correspondence groups:

.1 Correspondence Group on Fuel oil quality, to report to MEPC 73 (see paragraph 5.16); and

.2 Correspondence Group on EEDI review beyond phase 2, to report to MEPC 72, MEPC 73 and MEPC 74 (see paragraph 5.61).

Intersessional meetings

14.44 The Committee approved, subject to endorsement by the Council, the holding of:

.1 an intersessional meeting of the ESPH Working Group, in 2018;

.2 the third meeting of the Intersessional Working Group on Reduction of GHG emissions from ships (ISWG-GHG 3), from 3 to 6 April 2018, taking into account that C 117 had already endorsed, in principle, the holding of further intersessional meetings of the Group (see paragraphs 2.3.3 and 7.29); and

.3 an intersessional meeting on consistent implementation of regulation 14.1.3 of MARPOL Annex VI, in the second half of 2018 (see paragraph 14.28).

14.45 The Committee agreed to hold the second meeting of the Intersessional Working Group on Reduction of GHG emissions from ships (ISWG-GHG 2), which had already been endorsed by C 117 for autumn 2017 (see paragraph 2.3.3), from 23 to 27 October 2017 (see paragraph 7.19).

15 ELECTION OF THE CHAIR AND VICE-CHAIR FOR 2018

15.1 The Committee, in accordance with Rule 18 of its Rules of Procedure, unanimously elected Mr. H. Saito (Japan) as Chair and Mr. H. Conway (Liberia) as Vice-Chair, both for 2018.

16 ANY OTHER BUSINESS

Certificates of Fitness under the IBC, BCH, IGC, GC and EGC Codes

Guidance on completing the Certificate of Fitness

16.1 The Committee recalled that MEPC 70 had requested the Secretariat to prepare a draft joint MSC-MEPC circular, addressing how Certificates of Fitness were to be completed for ships that did not yet have to comply with the amendment requiring the provision of an approved stability instrument, along with recommendations on how the relevant resolutions could be comprehensively referenced in the Certificate of Fitness.

16.2 In this connection, the Committee was advised that the draft circular prepared by the Secretariat (MEPC 71/16/1, annex 1), which included guidance on completing the Certificate of Fitness under the IBC, BCH, IGC, GC and EGC Codes and references to amending resolutions, had also been submitted to MSC 98 (MSC 98/17, annex 1).

16.3 The Committee noted that MSC 98 had approved a draft MSC-MEPC.5 circular on *Guidance on completing the Certificate of Fitness under the IBC, BCH, IGC, GC and EGC Codes*, including a modification to paragraph 5.2 for clarification of the application, whereby the words "All up to and including resolution MSC.220(82) and paragraphs 2.2.6 and 2.2.7 of resolution MSC.370(93)" were replaced with the words "All applicable requirements contained in resolutions up to and including resolution MSC.220(82) and the requirements in paragraph 2.2.6 or 2.2.7 of the IGC Code, as amended by resolution MSC.370(93)".

16.4 Having considered the draft circular (MEPC 71/16/1, annex 1), together with the aforementioned modifications agreed by MSC 98, the Committee consequently concurrently approved MSC-MEPC.5/Circ.14 on *Guidance on completing the Certificate of Fitness under the IBC, BCH, IGC, GC and EGC Codes.*

Draft amendments to the IBC and BCH Codes

16.5 The Committee recalled that MEPC 70 had requested the Secretariat to develop draft relevant amendments to the IBC, BCH, GC, IGC and EGC Codes and noted that draft amendments to these Codes, all of which fell under the auspices of the MSC, had been submitted to MSC 98 (MSC 98/17, annexes 2 to 6). In this connection, the Committee further noted that of the five aforementioned Codes only the IBC and BCH Codes were also under the auspices of the MEPC.

16.6 The Committee noted that MSC 98 had approved the draft amendments to the Certificates of Fitness under the IBC, BCH, IGC, GC and EGC Codes prepared by the Secretariat without further modification (MSC 98/23, paragraph 17.6.2 and annexes 28, 29, 30, 31 and 32 respectively).

16.7 The Committee, having considered the draft amendments to the IBC and BCH Codes prepared by the Secretariat (MEPC 71/16/1, annexes 2 and 3), and taking into account the outcome of MSC 98, approved them, as set out in annexes 27 and 28, respectively, with a view to adoption at MEPC 72; and requested the Secretary-General to circulate the draft amendments to the IBC Code in accordance with article 16(2) of MARPOL.

Spill response contracts

16.8 The Committee considered document MEPC 71/16/2 (ISCO et al.) on the development of Spill Response Contract templates, and noted in addition an update provided by the co-sponsors that the contract templates were now finalized and freely available at the following website: www.bimco.org.

16.9 Having noted the information provided, the Committee encouraged the co-sponsors of the document to keep the Committee and the PPR Sub-Committee informed as to further progress made in relation to the contract templates, and encouraged Member States and international organizations to raise awareness of their existence.

Matters related to the Hong Kong Convention

16.10 The Committee noted document MEPC 71/INF.2 (Secretariat), outlining calculations of recycling capacity for meeting the entry-into-force conditions of the Hong Kong International Convention for the Safe and Environmentally Recycling of Ships, 2009.

16.11 In this connection, the Committee considered document MEPC 71/16/3 (India) providing information on the history of the Indian ship recycling industry, and specifically its establishment in the Gulf of Cambay, as well as the efforts to grow the ship recycling industry at Alang and move towards compliance with the Hong Kong Convention.

16.12 In the ensuing discussion, the delegation of Japan updated the Committee on their cooperation with India to support the improvement of ship recycling in India. Another delegation expressed the view that the entry into force of the Convention required the countries with the largest ship recycling volumes to continue to improve their practices, and encouraged other large ship recycling States to provide similar updates on their efforts toward compliance with the Convention.

16.13 The Committee expressed its appreciation to the delegation of India for the information provided and noted the significant advancements made in relation to compliance with the Hong Kong Convention and their consideration to move to ratify the Convention. The Committee also noted with appreciation information by the delegation of Denmark that they had recently acceded to the Convention and duly encouraged other Member States to consider a similar move in order to facilitate its entry into force.

Reduction of underwater noise from shipping

16.14 The Committee recalled that MEPC 66 had approved *Guidelines for the reduction of underwater noise from commercial shipping to address adverse impacts on marine life* (MEPC.1/Circ.833), while acknowledging that a large number of gaps in knowledge around this issue remained.

16.15 In this connection, the Committee considered document MEPC 71/16/5 (Canada), inviting countries to join Canada in working to enhance the understanding of ship noise and measures to mitigate it, building on the previous work of the Committee and Member States in this regard.

16.16 In the discussion that followed, several delegations expressed their support for the initiative of Canada; stressed the importance of this issue and the need for further research and collaboration to better understand the impact of ship noise; and informed the Committee of work already undertaken or currently underway to both study the impact of ship noise and to reduce underwater noise from shipping.

16.17 In conclusion, the Committee encouraged Member States to continue to share their experience in this field, in particular concerning the implementation of the Guidelines set out in MEPC.1/Circ.833, and to indicate their interest in collaborating with Canada to further address this issue.[7]

Cruise ships and oil pollution

16.18 Having considered document MEPC 71/16/6/Rev.1 (FOEI), outlining failings of the cruise industry in relation to oily waste discharge, in addition to considering the efficiency of enforcement regimes and recommending measures to safeguard against ship pollution of this kind, the Committee noted the information provided and encouraged Member States to continue implementation of and full compliance with the environmental protection measures required by IMO instruments.

Polar Code provisions concerning avoidance of marine mammals

16.19 The Committee considered document MEPC 71/16/7 (FOEI et al.) (also submitted to MSC 98 as document MSC 98/17/2), calling attention to the marine mammal avoidance provisions in part I-A, chapter 11 (Voyage planning) of the Polar Code, and reviewing data and communication tools relevant to its implementation. In this regard, the Committee noted that MSC 98 had invited Member States and international organizations to report on the status of their collection of marine mammal information and their communication of this information to masters transiting polar waters (MSC 98/23, paragraphs 17.12 to 17.14).

16.20 In this regard, the Committee also noted document MEPC 71/INF.38 (CSC et al.), outlining case studies that illustrated how marine mammal avoidance strategies might be incorporated into voyage planning.

16.21 Following discussion, the Committee invited Member States and international organizations to submit to the NCSR Sub-Committee information on the status of their collection of marine mammal information and their communication of this information to masters transiting polar waters, in line with the decision taken by MSC 98, and requested the Sub-Committee to keep the Committee informed of any progress.

Linkages between the work of MEPC and the SDGs

16.22 The Committee noted the information provided in document MEPC 71/INF.40 (Secretariat) on the identification of linkages between the work of the Committee and the Sustainable Development Goals (SDGs).

[7] **Contact details:**
Ms Michelle Sanders, Director, Clean Water Policy, Transport Canada (michelle.sanders@tc.gc.ca) and Mr. Paul Topping, Manager, Environmental Protection, Marine Safety and Security, Transport Canada (paul.topping@tc.gc.ca)

17 ACTION REQUESTED OF OTHER IMO BODIES

17.1 The Assembly, at its thirtieth session, is invited to:

.1 note the amendment to regulation B-3 and the adoption of resolution MEPC.287(71) on *Implementation of the BWM Convention*, and consequently revoke resolution A.1088(28) on the *Application of the International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004,* which has been superseded by the aforementioned resolution (paragraph 4.25);

.2 recall resolution A.229(22) on *Entry into force of Annex VI to MARPOL 73/78* and note that the issues the resolution seeks to address remain valid, in particular the need for the provision of technical assistance to support Member State accession, including preparation of national legislation, effective implementation and enforcement of the provisions of MARPOL Annex VI (paragraph 5.55); and

.3 adopt the draft Assembly resolution on the Code for the transport and handling of hazardous and noxious liquid substances in bulk on offshore support vessels (OSV Chemical Code) (paragraph 9.8 and annex 19).

17.2 The Council, at its 118th session, is invited to note the proposed outputs for the 2018-2019 biennium aligned to the new strategic directions approved by C 117, as approved by the Committee and reviewed by the Secretariat, taking into account the outcome of this session, in particular with regard to the proposals for new outputs (paragraph 14.37 and annex 24).

17.3 The Council, at its twenty-ninth extraordinary session, is invited to:

.1 consider the report of the seventy-first session of the MEPC and, in accordance with Article 21(b) of the IMO Convention, transmit it, with any comments and recommendations, to the thirtieth session of the Assembly;

.2 note the action taken by the Committee pursuant to the outcome of C 117 (paragraph 2.3);

.3 note that the Committee adopted amendments to MARPOL Annex VI (section 3 and annex 1);

.4 note the action taken by the Committee on issues related to ballast water management, in particular the agreement on a practical and pragmatic implementation schedule for ships to comply with the BWM Convention, which will enter into force on 8 September 2017, and the approval of pertinent draft amendments to the Convention, expected to be adopted at MEPC 72 (section 4 and annexes 2 to 12);

.5 note in particular that the Committee invited A 30 to note the amendment to regulation B-3 and the adoption of resolution MEPC.287(71) on *Implementation of the BWM Convention*, and consequently to revoke resolution A.1088(28) on the *Application of the International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004,* which has been superseded by the aforementioned resolution (paragraph 4.25);

.6 note the action taken by the Committee on issues related to air pollution and energy efficiency of ships, in particular the work related to the implementation of the mandatory energy efficiency measures in MARPOL Annex VI, (section 5 and annexes 13 to 15);

.7 note in particular that the Committee invited A 30 to recall resolution A.229(22) on *Entry into force of Annex VI to MARPOL 73/78* and to note that the issues the resolution seeks to address remain valid, in particular the need for the provision of technical assistance to support Member State accession, including preparation of national legislation, and effective implementation and enforcement of the provisions of MARPOL Annex VI (paragraph 5.55);

.8 note the action taken by the Committee on issues related to implementation of the data collection system for fuel oil consumption of ships (section 6 and annexes 16 and 17);

.9 note the progress made by the Committee on issues related to the reduction of GHG emissions from ships, in particular the agreement on a draft outline for the structure of the initial IMO GHG Strategy (section 7);

.10 note that the Committee approved terms of reference for the second and third meetings of the Intersessional Working Group on Reduction of GHG emissions from ships (ISWG-GHG), in particular that the second intersessional meeting, scheduled to take place from 23 to 27 October 2017, has been instructed to further develop the structure and identify core elements of the draft initial IMO GHG Strategy (paragraph 7.26);

.11 note that the Committee designated the Tubbataha Reefs Natural Park (Philippines) as a PSSA (paragraph 8.15 and annex 18);

.12 note the action taken by the Committee on the outcome of PPR 4, in particular the approval of a draft Assembly resolution on the Code for the transport and handling of hazardous and noxious liquid substances in bulk on offshore support vessels (OSV Chemical Code) (section 9 and annex 19);

.13 note the action taken by the Committee on the outcome of CCC 3 and SDC 4 (section 10 and annexes 20 and 21);

.14 note the action taken by the Committee regarding technical cooperation activities for the protection of the marine environment, in particular the approval of the five thematic priorities for the ITCP related to the protection of the marine environment for the 2018-2019 biennium (section 11);

.15 note that the Committee revised its Rules of Procedure, in line with the decisions of LEG 104 and MSC 98; and in this connection agreed that the holding of an extraordinary session with budgetary implications should be subject to the approval of the Council (paragraph 13.1 to 13.3 and annex 22);

.16 note that the Committee approved five new outputs for inclusions in its biennial agenda for 2018-2019 and its post-biennial agenda, respectively (paragraphs 14.1 to 14.28);

.17 note the status report of the outputs of the MEPC for the 2016-2017 biennium (paragraph 14.38 and annex 25);

.18 note that the Committee approved the items to be included in the agendas of MEPC 72 and MEPC 73 which have been scheduled to take place from 9 to 13 April 2018 and from 22 to 26 October 2018, respectively (paragraphs 14.39 and 14.41 and annex 26);

.19 endorse the holding of three intersessional meetings: of the ESPH Working Group, in 2018; of ISWG-GHG 3, from 3 to 6 April 2018; and on consistent implementation of regulation 14.1.3 of MARPOL Annex VI, in the second half of 2018 (paragraph 14.44);

.20 note that the Committee elected Mr. H. Saito (Japan) as Chair and Mr. H. Conway (Liberia) as Vice-Chair, both for 2018 (paragraph 15.1); and

.21 note that the Committee concurrently approved *Guidance on completing the Certificate of Fitness under the IBC, BCH, IGC, GC and EGC Codes* (MSC-MEPC.5/Circ.14), together with draft amendments to the IBC and BCH Codes; and discussed, inter alia, matters pertaining to the Hong Kong Convention, the reduction of underwater noise from shipping and marine mammals avoidance (section 16 and annexes 27 and 28).

17.4 The Maritime Safety Committee, at its ninety-ninth session, is invited to:

.1 note that MEPC 71, having noted that that MSC 97 had invited it to forward the amendments to the *2013 Interim guidelines for determining minimum propulsion power to maintain the manoeuvrability of ships in adverse conditions* (resolution MEPC.262(68)), once finalized, to the MSC, with a view to ensuring that safety aspects are adequately covered, agreed to keep the MSC informed of the ongoing work (paragraphs 5.44 to 5.47);

.2 note the concurrent approval, in principle, of draft revised chapter 21 of the IBC Code, pending finalization of the revision of chapters 17 and 18 of the Code, for subsequent circulation of all three revised chapters, with a view to adoption (paragraph 9.5);

.3 noted the concurrent approval of the draft Assembly resolution on Code for the transport and handling of hazardous and noxious liquid substances in bulk on offshore support vessels (OSV Chemical Code), including the modifications agreed by MSC 98, as well as further modifications agreed by the Committee, for submission to A 30, with a view to adoption (paragraphs 9.6 to 9.8 and annex 19);

.4 note that the Committee noted that MSC 98 adopted amendments to the IMSBC Code, including amendments regarding HME substances which are also related to MARPOL Annex V (paragraph 10.2);

.5 note that the Committee approved a unified interpretation of regulation 1.23 of MARPOL Annex I (MEPC.1/Circ.872) regarding the use of even-keel hydrostatics for determination of the regulatory deadweight to be entered on relevant statutory certificates, corresponding to MSC.1/Circ.1573 (paragraph 10.7);

.6 note that the Committee added, in the scope of the proposed new output on "Consistent implementation of regulation 14.1.3 of MARPOL Annex VI", consideration of the safety implications relating to the option of blending fuels

in order to meet the 0.50% m/m sulphur limit and instructed the PPR Sub-Committee to report to MSC any safety issues that may be identified with regard to low-sulphur oil fuel (paragraph 14.27);

.7 note that the Committee concurrently approved MSC-MEPC.5/Circ.14 on *Guidance on completing the Certificate of Fitness under the IBC, BCH, IGC, GC and EGC Codes* (paragraph 16.4); and

.8 note that the Committee approved draft amendments to the IBC and BCH Codes concerning the Certificate of Fitness, with a view to adoption at MEPC 72 (paragraph 16.7 and annexes 27 and 28).

17.5 The Technical Cooperation Committee, at its sixty-seventh session, is invited to note that the Committee approved the five thematic priorities for the ITCP related to the protection of the marine environment for the 2018-2019 biennium (paragraph 11.2).

17.6 The Technical Cooperation Committee, at its sixty-eighth session, is invited to note the suggestion of the delegation of the Islamic Republic of Iran that, in allocating IMO's ITCP resources to the Asia/Pacific region, owing to its large geographical coverage, consideration should be given to either redefining the coverage for the purposes of technical cooperation or adjusting the allocation of sufficient resources to the region (paragraph 11.10).

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(The annexes to this report have been issued as documents MEPC 71/17/Add.1 (annexes 1 to 10, 12 to 18 and 20 to 29) and MEPC 71/17/Add.2 (annexes 11 and 19))