MARITIME SAFETY COMMITTEE
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Agenda item 22

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REPORT OF THE MARITIME SAFETY COMMITTEE ON ITS NINETY-NINTH SESSION

Table of contents

LIST OF ANNEXES

1 INTRODUCTION – ADOPTION OF THE AGENDA

1.1 The ninety-ninth session of the Maritime Safety Committee was held at IMO Headquarters from 16 to 25 May 2018, chaired by Mr. Brad Groves (Australia). The Vice-Chair of the Committee, Mr. Juan Carlos Cubisino (Argentina), was also present.

1.2 The session was attended by Members and Associate Members, representatives from the 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 MSC 99/INF.1.

1.3 The session was also attended by the Chair of the Council, Mr. Xiaojie Zhang (China), and the Chair of the Facilitation Committee, Mr. Yury Melenas (Russian Federation).

Opening address of the Secretary-General

1.4 The Secretary-General welcomed participants and delivered his opening address, the full text of which can be downloaded from the IMO website at the following link: http://www.imo.org/en/MediaCentre/SecretaryGeneral/Secretary-GeneralsSpeechesToMeetings/Pages/MSC-99-opening.aspx

Chair's remarks

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 and related matters

1.6 The Committee adopted the agenda (MSC 99/1/Rev.1) and agreed to be guided in its work, in general, by the annotations contained in document MSC 99/1/1 and the arrangements set out in document MSC 99/1/2.

Credentials

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

2 DECISIONS OF OTHER IMO BODIES

2.1 The Committee, having noted the decisions of C 118 and C/ES.29 (MSC 99/2), MEPC 71 (MSC 99/2/2), TC 67 (MSC 99/2/3) and MEPC 72 (MSC 99/2/4) with regard to its work, agreed to take action as appropriate under the relevant agenda items.

Outcome of MEPC 71 and MEPC 72 regarding safety implications relating to the option of blending fuels in order to meet the 0.50% m/m sulphur limit

2.2 The Committee noted that MEPC 71 had added, in the scope of the proposed new output on "Consistent implementation of regulation 14.1.3 of MARPOL Annex VI", the consideration of safety implications relating to the option of blending fuels in order to meet the 0.50% m/m sulphur limit and had instructed the PPR Sub-Committee to report to MSC any safety issues that might be identified with regard to low-sulphur oil fuel.

2.3 The Committee also noted that an Intersessional Meeting on Consistent implementation of regulation 14.1.3 of MARPOL Annex VI had been scheduled to take place from 9 to 13 July 2018 and that MEPC 72 had authorized the Meeting to report its outcome to MEPC 73, for consideration and action, as appropriate. The Committee further noted that the outcome of the consideration of MEPC 73 of the report of the Meeting concerning safety issues that might be identified with regard to low-sulphur oil fuel would be reported to MSC 100, for its consideration.

Outcome of A 30

2.4 Having considered the outcome of A 30 (MSC 99/2/1), the Committee noted, in particular, that A 30 had adopted the following resolutions of general interest:

.1 *Strategic Plan for the Organization for the six-year period 2018 to 2023* (resolution A.1110(30)); and

.2 *Application of the Strategic Plan of the Organization* (resolution A.1111(30)).

2.5 With regard to the action requested of it by the Assembly, the Committee:

.1 noted that it would consider, under agenda item 19 (Application of the Committee's procedures on organization and method of work), changes to the *Organization and method of work of the Maritime Safety Committee and the Marine Environment Protection Committee and their subsidiary bodies* (MSC-MEPC.1/Circ.5) (the Committees' method of work) as a consequence of the adoption of resolution A.1111(30) (see section 19); and

.2 concurred with the decision of MEPC 72 to refer the first Consolidated Audit Summary Report (CASR), containing lessons learned from 18 mandatory audits completed in 2016 (Circular Letter No.3772), to III 5 for consideration and analysis under its agenda item on "Analysis of consolidated audit summary reports", and instructed the Sub-Committee on Implementation of IMO Instruments (III Sub-Committee) to report the outcome of its considerations to the Committee in due course.

3 CONSIDERATION AND ADOPTION OF AMENDMENTS TO MANDATORY INSTRUMENTS

GENERAL

3.1 Contracting Governments to the 1974 SOLAS Convention were invited to consider and adopt proposed amendments to:

.1 regulations II-1/1 and II-1/8-1 and chapter IV of, and the appendix to the annex to, the 1974 SOLAS Convention, as amended, in accordance with the provisions of article VIII of the Convention;

.2 the International Code of Safety for High-speed Craft, 1994 (1994 HSC Code), in accordance with the provisions of article VIII and regulation X/1.1 of the Convention;

.3 the International Code of Safety for High-speed Craft, 2000 (2000 HSC Code), in accordance with the provisions of article VIII and regulation X/1.2 of the Convention;

.4 annex 3 to the International Code for Application of Fire Test Procedures, 2010 (2010 FTP Code), in accordance with the provisions of article VIII and regulation II-2/3.23 of the Convention;

.5 the title of chapter 2 of part A of the International Code on Intact Stability, 2008 (2008 IS Code), as adopted by resolution MSC.413(97), in accordance with the provisions of article VIII and regulation II-1/2.27.1 of the Convention;

.6 the model forms of the Certificates of Fitness under the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code), in accordance with the provisions of article VIII and regulation VII/8.1 of the Convention;

.7 the model forms of the Certificates of Fitness under the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code), in accordance with the provisions of article VIII and regulation VII/11.1 of the Convention; and

.8 the International Maritime Dangerous Goods (IMDG) Code, in accordance with the provisions of article VIII and regulation VII/1.1 of the Convention.

3.2 More than one third of the Contracting Governments to the 1974 SOLAS Convention were present during the consideration and adoption of said amendments by the expanded Maritime Safety Committee, in accordance with articles VIII(b)(iii) and VIII(b)(iv) of the Convention. The proposed amendments to the Convention and the Codes mandatory under it had been circulated, in accordance with SOLAS article VIII(b)(i), to all IMO Members and Contracting Governments to the Convention by Circular Letters No.3758 of 10 August 2017 and No.3776 of 26 September 2017.

3.3 Parties to the Protocol of 1988 relating to the International Convention on Load Lines, 1966 (1988 Load Lines Protocol) were invited to consider and adopt proposed amendments to the title of chapter 2 of part A of the International Code on Intact Stability, 2008 (2008 IS Code), as adopted by resolution MSC.414(97), in accordance with the provisions of article VI of the 1988 Load Lines Protocol and regulation 3(16) of annex I to the International Convention on Load Lines, 1966, as modified by the 1988 Load Lines Protocol, as amended. Parties constituting more than one third of the total of Parties to the Protocol were present during the consideration and adoption of the said amendments by the expanded Maritime Safety Committee, in accordance with the provisions of paragraphs 2(c) and 2(d) of article VI of the 1988 Load Lines Protocol. The proposed amendments to the 2008 IS Code had been circulated, in accordance with paragraph 2(a) of article VI of the 1988 Load Lines Protocol, to all IMO Member States and Parties to the Protocol by Circular Letter No.3759 of 10 August 2017.

3.4 The Committee was also invited to consider and:

.1 adopt a draft MSC resolution on amendments to the Code of Safety for Special Purpose Ships, 2008 (2008 SPS Code);

.2 adopt a draft MSC resolution on amendments to the Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (BCH Code);

.3 adopt a draft MSC resolution on amendments to the Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (GC Code);

.4 adopt draft amendments to the Code for Existing Ships Carrying Liquefied Gases in Bulk (EGC Code);[1]

.5 approve the draft revised *Guidance on drafting of amendments to the 1974 SOLAS Convention and related mandatory instruments* (MSC.1/Circ.1500);

.6 approve a draft MSC circular on the procedural aspects related to the drafting of amendments to safety-related IMO conventions, other than the 1974 SOLAS Convention, and related mandatory instruments;

.7 decide on whether a draft MSC circular on amendment to the Record of Equipment under the Code of Safety for Special Purpose Ships, as adopted by resolution A.534(13), could be approved at the current session; or a draft new MSC resolution on amendments to the Code, incorporating the amendments adopted by resolution MSC.183(79) and approved by circulars MSC/Circ.478 and MSC/Circ.739, and the draft amendments proposed in the annex to document MSC 99/3/2/Add.1 (Secretariat), would be prepared for consideration at MSC 100; and

.8 approve a draft MSC circular on consolidated Revised Emergency Response Procedures for Ships Carrying Dangerous Goods (EmS Guide).

PROCEDURAL ASPECTS RELATED TO THE DRAFTING OF AMENDMENTS

3.5 The Committee recalled that MSC 98, following the consideration of cases where it might not be practicable to follow the provisions on keeping records for regulatory development, as set out in the *Guidance on drafting of amendments to the 1974 SOLAS Convention and related mandatory instruments* (MSC.1/Circ.1500) (hereinafter referred to as the Guidance on drafting amendments), had agreed that:

.1 for draft amendments having a long history of development and refinement, it would be the sub-committees' responsibility to ensure completion of check/monitoring sheets and records for regulatory development for such complicated issues;

.2 for draft amendments to be considered and finalized by sub-committees in plenary within one session, the Secretariat might be instructed, when necessary, to complete part III of the check/monitoring sheet and the records for regulatory development after the session, instead of establishing a specific working/drafting group;

.3 "minor corrections" could be excluded from the application of the provisions for completion of the check/monitoring sheet and the records for regulatory development; and

[1] Proposed amendments to the EGC Code need not be adopted by means of an MSC resolution, based on the decision of MSC 63 (MSC 63/23, paragraph 3.37). The Secretariat will ensure that the adopted amendments to the EGC Code are included in any relevant future IMO publications.

.4 the practice of keeping records for regulatory development of other safety-related IMO conventions, such as the 1966 LL Convention, the 1988 LL Protocol, the 1969 TM Convention, the 1978 STCW Convention, COLREG 1972 and 1972 CSC, must be expanded to all safety-related IMO conventions and mandatory instruments under those conventions;

and that, in view of the above decisions, the Committee had requested the Secretariat to prepare draft amendments to the Guidance on drafting amendments, for consideration at this session.

3.6 Having considered document MSC 99/3/3 (Secretariat), providing proposals on how the instructions of MSC 98 could be addressed, the Committee agreed that the most straightforward solution would be to:

.1 amend the Guidance on drafting amendments as per the decisions outlined in paragraphs 3.5.1 to 3.5.3 above, update references and introduce editorial modifications, as necessary; and

.2 develop a new separate MSC circular on the procedural aspects related to the drafting of amendments to safety-related IMO conventions, other than the 1974 SOLAS Convention, and related mandatory instruments, based on chapter 3 of the Guidance on drafting amendments.

3.7 In discussing the draft revised *Guidance on drafting of amendments to the 1974 SOLAS Convention and related mandatory instruments* (MSC.1/Circ.1500), as set out in annex 1 to document MSC 99/3/3, the Committee agreed to the following modifications:

.1 the new paragraph 3.1.2 should be further amended to read:

"3.1.2 Notwithstanding paragraph 3.1.1 above, the Guidance should not apply, in its entirety, to the 2011 ESP, IMDG and IMSBC Codes which are updated annually, and chapter 17 of the IBC Code and chapter 19 of the IGC Code should not be subject to the Guidance.";

.2 the text of paragraph 3.2.1.3.12.1 should be amended to read:

"in principle, the three-date system can be used for a chapter or regulation/paragraph governing design/construction of a ship, while the keel laying date can be used for a chapter or regulation/paragraph governing ship's equipment"; and

.3 the following new paragraph 3.2.1.3.12.6 should be added after the existing paragraph 3.2.1.3.12.5:

".6 where a phase-in arrangement for existing ships is deemed appropriate and that arrangement is based on the first survey or dry-docking after a specified date, the date of completion of the first scheduled survey or the date of completion of the first scheduled dry-docking should be used;[*]

[*] Refer to the *Unified interpretation of the date of completion of the survey and verification on which the certificates are based* (MSC-MEPC.5/Circ.3)."

3.8 The Committee also agreed to amend the text of paragraph 3.1.3.4 of the draft procedural aspects related to the drafting of amendments to safety-related IMO conventions, other than the 1974 SOLAS Convention, and related mandatory instruments (MSC 99/3/3, annex 2) as follows:

> "if application to existing ships is agreed by the Committee under 3.1.1.2 above, due attention should be paid to MSC/Circ.765-MEPC/Circ.315 on *Interim guidelines for the systematic application of the grandfather clauses* and, as appropriate, to MSC-MEPC.5/Circ.3 on *Unified interpretation of the date of completion of the survey and verification on which the certificates are based*;"

3.9 Following discussion, the Committee approved MSC.1/Circ.1500/Rev.1 on *Guidance on drafting of amendments to the 1974 SOLAS Convention and related mandatory instruments* and MSC.1/Circ.1587 on *Procedural aspects related to the drafting of amendments to safety-related IMO conventions, other than the 1974 SOLAS Convention, and related mandatory instruments*, both with immediate effect.

PROPOSED AMENDMENTS TO THE 1974 SOLAS CONVENTION

Draft amendments to SOLAS regulations II-1/1 and II-1/8-1 and related matters

Associated draft guidelines

3.10 The Committee recalled that MSC 98 had approved draft amendments to SOLAS regulations II-1/1 and II-1/8-1, with a view to adoption at this session, provided that SDC 5 confirmed the application date for draft SOLAS regulation II-1/8-1.3 and finalized the draft guidelines on stability computers and shore-based support for passenger ships constructed before 1 January 2014.

3.11 In this context, before deciding on adoption of the draft amendments to SOLAS regulations II-1/1 and II-1/8-1, the Committee considered the actions requested in paragraphs 15.2 and 15.3 of the report of SDC 5 (SDC 5/15), as reproduced in paragraphs 2.2 and 2.3 of document MSC 99/10 (Secretariat), and took action as outlined in paragraphs 3.12 to 3.14 below.

Application date of SOLAS regulation II-1/8-1.3

3.12 The Committee agreed that passenger ships constructed before 1 January 2014 shall comply with SOLAS regulation II-1/8-1.3.1 not later than the first renewal survey after five years after the date of entry into force of the amendments to SOLAS regulation II-1/8-1, i.e. not later than the first renewal survey after 1 January 2025 (see also paragraph 10.7).

Draft guidelines on operational information for masters in case of flooding for passenger ships constructed before 1 January 2014

3.13 The Committee had for its consideration the draft guidelines on operational information for masters in case of flooding for passenger ships constructed before 1 January 2014 (hereinafter referred to as the draft Guidelines) and the draft associated MSC circular (SDC 5/15, annex 1), as well as document MSC 99/10/3 (IACS), commenting on the draft Guidelines.

3.14 Following consideration, the Committee:

.1 confirmed that the term "non-linked breaches", used in paragraph 11 of the draft Guidelines, meant the same as "discontinuous hull breaches" (i.e. breaches to non-adjacent spaces);

.2 agreed to identify, in paragraph 25 of the draft Guidelines, the entity responsible for advising the Administration; and

.3 confirmed the contents of the draft Guidelines, in principle, and instructed the Drafting Group on Amendments to Mandatory Instruments to finalize the draft Guidelines and the draft associated MSC circular, based on documents SDC 5/15 (annex 1) and MSC 99/10/3, and prepare draft amendments to the *Guidelines on operational information for masters of passenger ships for safe return to port by own power or under tow* (MSC.1/Circ.1400) and the *Revised Guidelines on operational information for masters of passenger ships for safe return to port* (MSC.1/Circ.1532), as necessary.

Draft amendments to SOLAS regulations II-1/1 and II-1/8-1

3.15 The Committee considered the draft amendments to SOLAS regulations II-1/1 and II-1/8-1, as set out in annex 1 to document MSC 99/WP.5; noted that no comments had been submitted on the proposed amendments; and, taking into account the decisions outlined in paragraphs 3.12 and 3.14.3 above, confirmed the contents of the proposed amendments, subject to editorial improvements, if any.

Draft amendments to chapter IV and the appendix

3.16 The Committee recalled that MSC 98 had approved draft amendments to chapter IV of, and the appendix to the annex to, the 1974 SOLAS Convention, replacing all references to "Inmarsat" with references to "a recognized mobile satellite service".

3.17 Having noted that no comments had been submitted on the proposed amendments, the Committee confirmed the contents of the proposed amendments to chapter IV of, and the appendix to the annex to, the 1974 SOLAS Convention, as set out in annex 1 to document MSC 99/WP.5, subject to editorial improvements, if any.

Date of entry into force of the proposed amendments

3.18 The Committee agreed that the aforementioned draft amendments to regulations II-1/1 and II-1/8-1, and chapter IV of, and the appendix to the annex to, the 1974 SOLAS Convention, as amended, proposed for adoption at this session, should be deemed to have been accepted on 1 July 2019 and enter into force on 1 January 2020, in accordance with the *Guidance on entry into force of amendments to the 1974 SOLAS Convention and related mandatory instruments* (MSC.1/Circ.1481).

PROPOSED AMENDMENTS TO THE 2010 FTP, 1994 AND 2000 HSC, IBC, IGC AND IMDG CODES, MANDATORY UNDER THE 1974 SOLAS CONVENTION

Draft amendments to the 2010 FTP Code

3.19 The Committee recalled that MSC 98 had approved draft amendments to annex 3 to the 2010 FTP Code, concerning fire protection materials and required approval test methods for passenger ships and high-speed craft.

3.20 Having noted that no comments had been submitted on the proposed amendments, the Committee confirmed the contents of the proposed amendments to annex 3 to the 2010 FTP Code, as set out in annex 2 to document MSC 99/WP.5, subject to editorial improvements, if any.

Date of entry into force of the proposed amendments

3.21 The Committee agreed that the above amendments to annex 3 to the 2010 FTP Code, proposed for adoption at the current session, should be deemed to have been accepted on 1 July 2019 and enter into force on 1 January 2020, in accordance with the *Guidance on entry into force of amendments to the 1974 SOLAS Convention and related mandatory instruments* (MSC.1/Circ.1481).

Draft amendments to the 1994 HSC Code

3.22 The Committee recalled that MSC 98, following the approval of the draft amendments to chapter IV of, and the appendix to the annex to, the 1974 SOLAS Convention (see paragraph 3.16), had approved draft consequential amendments to the 1994 HSC Code.

3.23 Having noted that no comments had been submitted on the proposed amendments, the Committee confirmed the contents of the proposed amendments to the 1994 HSC Code, as set out in annex 3 to document MSC 99/WP.5, subject to editorial improvements, if any.

Date of entry into force of the proposed amendments

3.24 The Committee agreed that the above amendments to the 1994 HSC Code, proposed for adoption at the current session, should be deemed to have been accepted on 1 July 2019 and enter into force on 1 January 2020, in accordance with the *Guidance on entry into force of amendments to the 1974 SOLAS Convention and related mandatory instruments* (MSC.1/Circ.1481).

Draft amendments to the 2000 HSC Code

3.25 The Committee recalled that MSC 98, following the approval of the draft amendments to chapter IV of, and the appendix to the annex to, the 1974 SOLAS Convention (see paragraph 3.16), had approved draft consequential amendments to the 2000 HSC Code.

3.26 Having noted that no comments had been submitted on the proposed amendments, the Committee confirmed the contents of the proposed amendments to the 2000 HSC Code, as set out in annex 4 to document MSC 99/WP.5, subject to editorial improvements, if any.

Date of entry into force of the proposed amendments

3.27 The Committee agreed that the above amendments to the 2000 HSC Code, proposed for adoption at the current session, should be deemed to have been accepted on 1 July 2019 and enter into force on 1 January 2020, in accordance with the *Guidance on entry into force of amendments to the 1974 SOLAS Convention and related mandatory instruments* (MSC.1/Circ.1481).

Draft amendment to the IBC Code

3.28 The Committee recalled that MSC 98 had approved a draft amendment to the model form of the Certificate of Fitness under the IBC Code.

3.29 Having noted that no comments had been submitted on the proposed amendment, the Committee confirmed the contents of the proposed amendment to the model form of the Certificate of Fitness under the IBC Code, as set out in annex 5 to document MSC 99/WP.5, subject to editorial improvements, if any.

Date of entry into force of the proposed amendment

3.30 The Committee agreed that the above amendment to the model form of the Certificate of Fitness under the IBC Code, proposed for adoption at the current session, should be deemed to have been accepted on 1 July 2019 and enter into force on 1 January 2020, in accordance with the *Guidance on entry into force of amendments to the 1974 SOLAS Convention and related mandatory instruments* (MSC.1/Circ.1481).

Draft amendment to the IGC Code

3.31 The Committee recalled that MSC 98 had approved a draft amendment to the model form of the Certificate of Fitness under the IGC Code.

3.32 Having noted that no comments had been submitted on the proposed amendment, the Committee confirmed the contents of the proposed amendment to the model form of the Certificate of Fitness under the IGC Code, as set out in annex 6 to document MSC 99/WP.5, subject to editorial improvements, if any.

Date of entry into force of the proposed amendment

3.33 The Committee agreed that the above amendment to the model form of the Certificate of Fitness under the IGC Code, proposed for adoption at the current session, should be deemed to have been accepted on 1 July 2019 and enter into force on 1 January 2020, in accordance with the *Guidance on entry into force of amendments to the 1974 SOLAS Convention and related mandatory instruments* (MSC.1/Circ.1481).

Draft amendments to the IMDG Code

3.34 The Committee recalled that the draft amendments to the IMDG Code had been agreed by CCC 4, finalized by E&T 28 and circulated in accordance with SOLAS article VIII and the agreed amendment procedure for the IMDG Code (MSC 75/24, paragraph 7.36.3), for consideration with a view to adoption at the current session.

3.35 Having noted that no comments had been submitted on the proposed amendments, the Committee confirmed the contents of the proposed amendments to the IMDG Code, as set out in the annex to document MSC 99/3/Add.1 (Secretariat), subject to editorial improvements, if any.

Date of entry into force of the proposed amendments

3.36 The Committee agreed that the above amendments to the IMDG Code, proposed for adoption at the current session, should be deemed to have been accepted on 1 July 2019 and enter into force on 1 January 2020, and that SOLAS Contracting Governments could apply the amendments in whole, or in part, on a voluntary basis as from 1 January 2019.

PROPOSED AMENDMENT TO THE 2008 IS CODE, MANDATORY UNDER THE 1974 SOLAS CONVENTION AND THE 1988 LOAD LINES PROTOCOL

3.37 The Committee recalled that MSC 98 had agreed that the footnote to the title of chapter 2 of part A to the 2008 IS Code, as adopted by resolutions MSC.413(97) and MSC.414(97), should be deleted; had requested the Secretariat to prepare a draft amendment to the 2008 IS Code and the associated draft MSC resolutions, for consideration at that session; and had approved a draft amendment to the title of chapter 2 of part A of the 2008 IS Code.

3.38 Having noted that no comments had been submitted on the proposed amendment, the Committee confirmed the contents of the proposed amendment to the title of chapter 2 of part A of the 2008 IS Code, as set out in annex 7 to document MSC 99/WP.5 and in the annex to document MSC 99/3/1 (Secretariat), subject to editorial improvements, if any.

Date of entry into force of the proposed amendment

3.39 The Committee agreed that the above amendment to the title of chapter 2 of part A of the 2008 IS Code, proposed for adoption at the current session, should be deemed to have been accepted on 1 July 2019 and enter into force on 1 January 2020, in conjunction with the entry into force of the amendments to the 2008 IS Code adopted by resolutions MSC.413(97) and MSC.414(97).

PROPOSED AMENDMENTS TO, AND REVISIONS OF, NON-MANDATORY INSTRUMENTS

Draft amendment to the 2008 SPS Code

3.40 The Committee recalled that MSC 98, following the approval of the draft amendments to chapter IV of, and the appendix to the annex to, the 1974 SOLAS Convention (see paragraph 3.14), had considered and approved, in principle, a draft consequential amendment to the Record of Equipment under the 2008 SPS Code, as set out in annex 21 to the report of MSC 98 (MSC 98/23/Add.1), with a view to adoption at the current session, in conjunction with the adoption of the amendments to chapter IV of, and the appendix to the annex to, the 1974 SOLAS Convention.

3.41 Having noted that no comments had been submitted on the proposed amendment, the Committee confirmed the contents of the proposed consequential amendment to the model form of the Record of Equipment under the 2008 SPS Code, as set out in annex 1 to document MSC 99/3/2 (Secretariat), subject to editorial improvements, if any.

Date of taking effect of the proposed amendment

3.42 The Committee agreed that the above consequential amendment, proposed for adoption at this session, should take effect on 1 January 2020, in conjunction with the entry into force of the amendments to chapter IV of, and the appendix to the annex to, the 1974 SOLAS Convention.

Draft amendment to the BCH Code

3.43 The Committee recalled that MSC 98 had approved a draft amendment to the model form of the Certificate of Fitness under the BCH Code, as set out in annex 29 to the report of MSC 98 (MSC 98/23/Add.1), with a view to adoption at the current session, in conjunction with the adoption of the amendments to the model forms of the Certificates of Fitness under the IBC and IGC Codes.

3.44 Having noted that no comments had been submitted on the proposed amendment, the Committee:

.1 confirmed the contents of the proposed amendment to the model form of the Certificate of Fitness under the BCH Code, as set out in annex 2 to document MSC 99/3/2, subject to editorial improvements, as necessary; and

.2 instructed the Drafting Group on Amendments to Mandatory Instruments to take into account the editorial correction to the model form of the Certificate of Fitness under the BCH Code, adopted by MEPC 72 (i.e. replacing the word "shall" with the word "should" in the new paragraph 7.2 and the last sentence of the new paragraph 7), when finalizing the draft amendment to the model form of the Certificate of Fitness under the BCH Code.

Date of taking effect of the proposed amendment

3.45 The Committee agreed that the amendment to the model form of the Certificate of Fitness under the BCH Code, proposed for adoption at the current session, should take effect on 1 January 2020, in conjunction with the entry into force of the amendments to the model forms of the Certificates of Fitness under the IBC and IGC Codes.

Draft amendment to the EGC Code

3.46 The Committee recalled that MSC 98 had approved a draft amendment to the model form of the Certificate of Fitness under the EGC Code, as set out in annex 32 to the report of MSC 98 (MSC 98/23/Add.1), with a view to adoption at the current session, in conjunction with the adoption of the amendments to the model forms of the Certificates of Fitness under the IBC and IGC Codes.

3.47 Having noted that no comments had been submitted on the proposed amendment, the Committee:

.1 confirmed the contents of the proposed amendment to the model form of the Certificate of Fitness under the EGC Code, as set out in annex 4 to document MSC 99/3/2, subject to editorial improvements, as necessary; and

.2 instructed the Drafting Group on Amendments to Mandatory Instruments to take into account the editorial correction to the model form of the Certificate of Fitness under the BCH Code, adopted by MEPC 72 (i.e. replacing

the word "shall" with the word "should" in the new paragraph 7.2 and the last sentence of the new paragraph 7), when finalizing the draft amendment to the model form of the Certificate of Fitness under the EGC Code.

Date of taking effect of the proposed amendment

3.48 The Committee agreed that the amendment to the model form of the Certificate of Fitness under the EGC Code, proposed for adoption at the current session, should take effect on 1 January 2020, in conjunction with the entry into force of the amendments to the model forms of the Certificates of Fitness under the IBC and IGC Codes.

Draft amendment to the GC Code

3.49 The Committee recalled that MSC 98 had approved a draft amendment to the model form of the Certificate of Fitness under the GC Code, as set out in annex 31 to the report of MSC 98 (MSC 98/23/Add.1), with a view to adoption at the current session, in conjunction with the adoption of the amendments to the model forms of the Certificates of Fitness under the IBC and IGC Codes.

3.50 Having noted that no comments had been submitted on the proposed amendment, the Committee:

.1 confirmed the contents of the proposed amendment to the model form of the Certificate of Fitness under the GC Code, as set out in annex 3 to document MSC 99/3/2, subject to editorial improvements, as necessary; and

.2 instructed the Drafting Group on Amendments to Mandatory Instruments to take into account the editorial correction to the model form of the Certificate of Fitness under the BCH Code, adopted by MEPC 72 (i.e. replacing the word "shall" with the word "should" in the new paragraph 7.2 and the last sentence of the new paragraph 7), when finalizing the draft amendment to the model form of the Certificate of Fitness under the GC Code.

Date of taking effect of the proposed amendment

3.51 The Committee agreed that the amendment to the model form of the Certificate of Fitness under the GC Code, proposed for adoption at the current session, should take effect on 1 January 2020, in conjunction with the entry into force of the amendments to the model forms of the Certificates of Fitness under the IBC and IGC Codes.

Proposed amendment to the SPS Code (resolution A.534(13))

3.52 The Committee recalled that, following the approval of the draft amendments to chapter IV of, and the appendix to the annex to, the 1974 SOLAS Convention, MSC 98 had requested the Secretariat to prepare draft consequential amendments to the Code of Safety for Special Purpose Ships (resolution A.534(13)), with a view to adoption at this session.

3.53 Having considered document MSC 99/3/2/Add.1, in particular the two alternative solutions proposed in paragraph 4, the Committee agreed to the option in paragraph 4.2 and requested the Secretariat to prepare a draft MSC resolution on amendments to the SPS Code (resolution A.534(13)), incorporating the amendments adopted by resolution MSC.183(79) and approved by circulars MSC/Circ.478 and MSC/Circ.739, and the draft amendments proposed in the annex to document MSC 99/3/2/Add.1, for consideration at the next session.

Draft consolidated EmS Guide

3.54 The Committee recalled that MSC 96, taking into account that the *Emergency Response Procedures for Ships Carrying Dangerous Goods (EmS Guide)* (MSC/Circ.1025) had already been amended a number of times, had instructed the CCC Sub-Committee to consider, at the next revision of the Guide, preparing a consolidated version of the Guide, rather than continue issuing every two years MSC circulars which contain only amendments.

3.55 The Committee also recalled that a consolidated version of the EmS Guide had been agreed by CCC 4 and, subsequently, finalized by E&T 28, with a view to approval at this session, in conjunction with the adoption of the draft amendments to the IMDG Code.

3.56 Having noted that no comments had been submitted on the draft consolidated EmS Guide, the Committee confirmed its contents, as set out in the annex to document MSC 99/3/Add.2 (Secretariat), subject to editorial improvements, if any.

ESTABLISHMENT OF THE DRAFTING GROUP ON AMENDMENTS TO MANDATORY INSTRUMENTS

3.57 Having considered the above matters, the Committee established the Drafting Group on Amendments to Mandatory Instruments and instructed it, taking into account comments made and decisions taken in plenary, to prepare, for consideration by the Committee with a view to adoption or approval, as appropriate, the final text of the:

.1 draft amendments to regulations II-1/1 and II-1/8-1 and chapter IV of, and the appendix to the annex to, the 1974 SOLAS Convention, as amended, including the associated MSC resolution;

.2 draft amendments to annex 3 to the 2010 FTP Code, including the associated MSC resolution;

.3 draft amendments to the 1994 HSC Code, including the associated MSC resolution;

.4 draft amendments to the 2000 HSC Code, including the associated MSC resolution;

.5 draft amendment to the model form of the Certificate of Fitness under the IBC Code, including the associated MSC resolution;

.6 draft amendment to the model form of the Certificate of Fitness under the IGC Code, including the associated MSC resolution;

.7 draft amendments to the IMDG Code, including the associated MSC resolution;

.8 draft amendment to the title of chapter 2 of part A of the 2008 IS Code, including the associated MSC resolutions for SOLAS Contracting Governments and the 1988 Load Line Protocol Parties, respectively;

.9 draft amendments to the model form of the Record of Equipment under the 2008 SPS Code, including the associated MSC resolution;

.10 draft amendments to the model form of the Certificate of Fitness under the BCH Code, including the associated MSC resolution;

.11 draft amendments to the model form of the Certificate of Fitness under the GC Code, including the associated MSC resolution;

.12 draft amendments to the model form of the Certificate of Fitness under the EGC Code;

.13 revised EmS Guide, including the associated MSC circular;

.14 guidelines on operational information for masters in case of flooding for passenger ships constructed before 1 January 2014, including the associated MSC circular;

.15 amendments to the *Guidelines on operational information for masters of passenger ships for safe return to port by own power or under tow* (MSC.1/Circ.1400), including the associated MSC circular; and

.16 amendments to the *Revised Guidelines on operational information for masters of passenger ships for safe return to port* (MSC.1/Circ.1532), including the associated MSC circular.

REPORT OF THE DRAFTING GROUP

3.58 Having considered the report of the Drafting Group on Amendments to Mandatory Instruments (MSC 99/WP.7), the Committee approved it in general and took action as outlined below.

Footnotes-related issues

3.59 The Committee recalled its decision at MSC 94 that the footnotes, which were introduced for reference purposes only and did not form part of the adopted amendments, should not appear in the authentic text of mandatory instruments. Consequently, the Committee authorized the Secretariat, when preparing the authentic texts of adopted amendments, to exclude such footnotes.

3.60 Having noted that the Group had decided not to change the current practice of including footnotes in the authentic text of the IMDG Code, the Committee instructed the CCC Sub-Committee, taking into account the decision in paragraph 3.59 above, to review the footnotes in the IMDG Code when preparing the next consolidated version (amendment 40-20), and advise the Committee on how best to proceed.

3.61 The Committee, having recalled its decision at MSC 94 (MSC 94/21, paragraph 15.7), agreed with the Group's view that model forms of certificates should not be considered as parts of the main body of the regulations. Consequently, the Committee confirmed that the footnotes contained in the model forms of the Certificate of Fitness under the IBC and IGC Codes should not be excluded from the authentic text, and invited the Marine Environment Protection Committee (MEPC) to note this decision.

Adoption of amendments to the 1974 SOLAS Convention, as amended, including related mandatory codes

Adoption of amendments to regulations II-1/1 and II-1/8-1 and chapter IV of, and the appendix to the annex to, the 1974 SOLAS Convention, as amended

3.62 The expanded Committee, including delegations of 96 Contracting Governments to the 1974 SOLAS Convention, having considered the final text of the proposed amendments to regulations II-1/1 and II-1/8-1, chapter IV of, and the appendix to the annex to, the 1974 SOLAS Convention, as amended, prepared by the Drafting Group (MSC 99/WP.7, annex 1):

.1 recalled that it had adopted, by resolution MSC.421(98), inter alia, amendments to SOLAS regulations II-1/1 and II-1/8-1;

.2 recognized that the amendments to SOLAS regulations II-1/1 and II-1/8-1 adopted by resolution MSC.421(98) should be superseded by the draft amendments to regulations II-1/1 and II-1/8-1 adopted at this session and agreed that the text of the associated MSC resolution should contain text to this effect;

.3 agreed that for the purpose of clarity the words "ship earth station providing a recognized mobile satellite service" should be replaced with the words "recognized mobile satellite service ship earth station" in the text of the draft amendments to chapter IV of, and the appendix to the annex to, the 1974 SOLAS Convention, as well as in the text of the draft consequential amendments to the 1994 and 2000 HSC and 2008 SPS Codes; and

.4 adopted the proposed amendments to regulations II-1/1 and II-1/8-1 and chapter IV of, and the appendix to the annex to, the 1974 SOLAS Convention, as amended, unanimously by resolution MSC.436(99), as set out in annex 1.

3.63 In adopting resolution MSC.436(99), the expanded Committee determined, in accordance with article VIII(b)(vi)(2)(bb) of the 1974 SOLAS Convention, that the adopted amendments to the Convention should be deemed to have been accepted on 1 July 2019 (unless, prior to that date, objections were communicated to the Secretary-General, as provided for in article VIII(b)(vi)(2) of the Convention) and enter into force on 1 January 2020, in accordance with the *Guidance on entry into force of amendments to the 1974 SOLAS Convention and related mandatory instruments* (MSC.1/Circ.1481) (hereinafter referred to as the Guidance on entry into force of amendments).

Adoption of amendments to the 2010 FTP Code

3.64 The expanded Committee, including delegations of 96 Contracting Governments to the 1974 SOLAS Convention, considered the final text of the proposed amendments to annex 3 to the 2010 FTP Code, prepared by the Drafting Group (MSC 99/WP.7, annex 2), and adopted the amendments unanimously by resolution MSC.437(99), as set out in annex 2.

3.65 In adopting resolution MSC.437(99), the expanded Committee determined, in accordance with article VIII(b)(vi)(2)(bb) of the 1974 SOLAS Convention, that the adopted amendments to the 2010 FTP Code should be deemed to have been accepted on 1 July 2019 (unless, prior to that date, objections were communicated to the Secretary-General, as provided for in article VIII(b)(vi)(2) of the Convention) and enter into force on 1 January 2020, in accordance with the Guidance on entry into force of amendments.

Adoption of amendments to the 1994 HSC Code

3.66 The expanded Committee, including delegations of 96 Contracting Governments to the 1974 SOLAS Convention, considered the final text of the proposed amendments to the 1994 HSC Code, prepared by the Drafting Group (MSC 99/WP.7, annex 3), and adopted the amendments unanimously by resolution MSC.438(99), as set out in annex 3.

3.67 In adopting resolution MSC.438(99), the expanded Committee determined, in accordance with article VIII(b)(vi)(2)(bb) of the 1974 SOLAS Convention, that the adopted amendments to the 1994 HSC Code should be deemed to have been accepted on 1 July 2019 (unless, prior to that date, objections are communicated to the Secretary-General, as provided for in article VIII(b)(vi)(2) of the Convention) and enter into force on 1 January 2020, in accordance with the Guidance on entry into force of amendments.

Adoption of amendments to the 2000 HSC Code

3.68 The expanded Committee, including delegations of 96 Contracting Governments to the 1974 SOLAS Convention, considered the final text of the proposed amendments to the 2000 HSC Code, prepared by the Drafting Group (MSC 99/WP.7, annex 4), and adopted the amendments unanimously by resolution MSC.439(99), as set out in annex 4.

3.69 In adopting resolution MSC.439(99), the expanded Committee determined, in accordance with article VIII(b)(vi)(2)(bb) of the 1974 SOLAS Convention, that the adopted amendments to the 2000 HSC Code should be deemed to have been accepted on 1 July 2019 (unless, prior to that date, objections are communicated to the Secretary-General, as provided for in article VIII(b)(vi)(2) of the Convention) and enter into force on 1 January 2020, in accordance with the Guidance on entry into force of amendments.

Adoption of the amendment to the IBC Code

3.70 The expanded Committee, including delegations of 96 Contracting Governments to the 1974 SOLAS Convention, considered the final text of the proposed amendment to the model form of the Certificate of Fitness under the IBC Code, prepared by the Drafting Group (MSC 99/WP.7, annex 5), and adopted the amendment unanimously by resolution MSC.440(99), as set out in annex 5.

3.71 In adopting resolution MSC.440(99), the expanded Committee determined, in accordance with article VIII(b)(vi)(2)(bb) of the 1974 SOLAS Convention, that the adopted amendment to the model form of the Certificate of Fitness under the IBC Code should be deemed to have been accepted on 1 July 2019 (unless, prior to that date, objections are communicated to the Secretary-General, as provided for in article VIII(b)(vi)(2) of the Convention) and enter into force on 1 January 2020, in accordance with the Guidance on entry into force of amendments.

Adoption of the amendment to the IGC Code

3.72 The expanded Committee, including delegations of 96 Contracting Governments to the 1974 SOLAS Convention, considered the final text of the proposed amendment to the model form of the Certificate of Fitness under the IGC Code, prepared by the Drafting Group (MSC 99/WP.7, annex 6), and adopted the amendment unanimously by resolution MSC.441(99), as set out in annex 6.

3.73 In adopting resolution MSC.441(99), the expanded Committee determined, in accordance with article VIII(b)(vi)(2)(bb) of the 1974 SOLAS Convention, that the adopted amendment to the model form of the Certificate of Fitness under the IGC Code should be deemed to have been accepted on 1 July 2019 (unless, prior to that date, objections are communicated to the Secretary-General, as provided for in article VIII(b)(vi)(2) of the Convention) and enter into force on 1 January 2020, in accordance with the Guidance on entry into force of amendments.

Adoption of amendments to the IMDG Code

3.74 The expanded Committee, including delegations of 96 Contracting Governments to the 1974 SOLAS Convention, considered the proposed amendments to the IMDG Code (amendment 39-18), prepared by the Drafting Group (MSC 99/WP.7, annex 7), and adopted the amendments unanimously by resolution MSC.442(99), as set out in annex 7.

3.75 In adopting resolution MSC.442(99), the expanded Committee determined, in accordance with article VIII(b)(vi)(2)(bb) of the 1974 SOLAS Convention, that the adopted amendments to the IMDG Code should be deemed to have been accepted on 1 July 2019 (unless, prior to that date, objections are communicated to the Secretary-General, as provided for in article VIII(b)(vi)(2) of the Convention) and enter into force on 1 January 2020, in accordance with the provisions of SOLAS article VIII.

3.76 The Committee agreed, in accordance with the procedure adopted by MSC 75 for the adoption of amendments to the IMDG Code with regard to voluntary application of new amendments one year prior to the date of entry into force, as stated in operative paragraph 4 of the above resolution, that Contracting Governments could apply the aforementioned amendments in whole or in part on a voluntary basis from 1 January 2019, pending their entry into force on 1 January 2020.

Adoption of the amendment to part A of the 2008 IS Code

Mandatory under SOLAS

3.77 The expanded Committee, including delegations of 96 Contracting Governments to the 1974 SOLAS Convention, having considered the final text of the proposed amendment to the title of chapter 2 of part A of the 2008 IS Code, prepared by the Drafting Group (MSC 99/WP.7, annex 8):

.1 adopted the amendment unanimously by resolution MSC.443(99), as set out in annex 8; and

.2 agreed that this amendment and the amendments adopted by resolution MSC.413(97) should be read and interpreted together as one single document.

3.78 In adopting resolution MSC.443(99), the expanded Committee determined, in accordance with article VIII(b)(vi)(2)(bb) of the 1974 SOLAS Convention, that the adopted amendment to the title of chapter 2 of part A of the 2008 IS Code should be deemed to have been accepted on 1 July 2019 (unless, prior to that date, objections are communicated to the Secretary-General, as provided for in article VIII(b)(vi)(2) of the Convention) and enter into force on 1 January 2020, in conjunction with the entry into force of the amendments to the 2008 IS Code adopted by resolutions MSC.413(97).

Mandatory under the 1988 Load Lines Protocol

3.79 The expanded Committee, including delegations of 76 Parties to the 1988 Load Lines Protocol, having considered the final text of the proposed amendment to the title of chapter 2 of part A of the 2008 IS Code, prepared by the Drafting Group (MSC 99/WP.7, annex 9):

.1 adopted the amendment unanimously by resolution MSC.444(99), as set out in annex 9; and

.2 agreed that this amendment and the amendments adopted by resolution MSC.414(97) should be read and interpreted together as one single document.

3.80 In adopting resolution MSC.444(99), the expanded Committee determined, in accordance with paragraph 2(f)(ii)(bb) of article VI of the 1988 Load Lines Protocol, that the adopted amendment to the title of chapter 2 of part A of the 2008 IS Code should be deemed to have been accepted on 1 July 2019 (unless, prior to that date, objections were communicated to the Secretary-General, as provided in paragraph 2(g)(ii) of article VI of the Protocol) and enter into force on 1 January 2020, in conjunction with the entry into force of the amendments to the 2008 IS Code adopted by resolution MSC.414(97).

Adoption/approval of amendments to non-mandatory instruments

3.81 The Committee considered the final text of amendments to non-mandatory instruments prepared by the Drafting Group (MSC 99/WP.7, annexes 10 to 16) and:

.1 adopted the amendment to the 2008 SPS Code by resolution MSC.445(99), as set out in annex 10;

.2 adopted the amendment to the BCH Code by resolution MSC.446(99), as set out in annex 11;

.3 adopted the amendment to the GC Code by resolution MSC.447(99), as set out in annex 12;

.4 adopted the amendment to the EGC Code, as set out in annex 13;

.5 approved MSC.1/Circ.1588 on *Revised Emergency Response Procedures for Ships Carrying Dangerous Goods (EmS Guide)*;

.6 approved MSC.1/Circ.1589 on *Guidelines on operational information for masters in case of flooding for passenger ships constructed before 1 January 2014* and agreed to keep it in abeyance until the date of the entry into force of the amendments to SOLAS regulation II-1/8-1.3 adopted at this session, i.e. 1 January 2020 (see also paragraph 10.8); and

.7 approved MSC.1/Circ.1532/Rev.1 on *Revised Guidelines on operational information for masters of passenger ships for safe return to port (MSC.1/Circ.1532)* and agreed to keep it in abeyance until the date of the entry into force of the amendments to SOLAS regulation II-1/8-1.3 adopted at this session, i.e. 1 January 2020.

INSTRUCTIONS TO THE SECRETARIAT

3.82 The Committee authorized the Secretariat, when preparing the authentic texts of the amendments adopted at this session, to:

.1 make any editorial corrections that might be identified, including updating references to renumbered paragraphs, and to bring to the attention of the Committee any errors or omissions which required action by the Contracting Governments to the 1974 SOLAS Convention or Parties to the 1988 Load Lines Protocol; and

.2 exclude footnotes which did not form part of the adopted amendments and were for reference purposes only (see paragraphs 3.59 to 3.61).

3.83 The Committee further requested the Secretariat to ensure that the final text of the amendments contained in the annexes to the report be presented as clean text (i.e. without showing track changes).

4 MEASURES TO ENHANCE MARITIME SECURITY

Updates on developments related to maritime security since MSC 98

4.1 The Committee considered document MSC 99/4/1 (Secretariat) reporting on developments related to maritime security since MSC 98 and noted, in particular, that:

.1 the information of 28% of all port facilities registered in the security module of GISIS submitted by Member States in accordance with SOLAS regulation XI-2/13.4 required updating;

.2 the new functionalities (i.e. web services) to enable the secure electronic transfer of information between Member States and the maritime security module of GISIS had been developed and were being tested with the assistance of Norway;

.3 a United Nations Global Counter-Terrorism Coordination Compact had been agreed by the United Nations Counter-Terrorism Implementation Task Force (CTITF) entities, including IMO, with the aim of strengthening and institutionalizing an "All of United Nations" approach to coordination and coherence in the counter-terrorism and prevention of violent extremism (PVE) work of the United Nations system;

.4 Member States should be encouraged to become Parties to the 2005 SUA Protocols, which entered into force on 28 July 2010;

.5 the request to the Secretariat to prepare information for seafarers and interested stakeholders on the key aims of the International Code for the Security of Ships and of Port Facilities (ISPS Code) as part of the periodic review of administrative requirements in mandatory IMO instruments had been overtaken by events, taking into account the security training requirements for all seafarers in relation to the Manila amendments to the 1978 STCW Convention; and

.6 the security-related technical cooperation activities delivered by the Organization, as part of its Integrated Technical Cooperation Programme (ITCP), had contributed significantly to enhancement of maritime security.

4.2 In this context, the Committee:

.1 urged SOLAS Contracting Governments to review and update the information contained in the maritime security module of GISIS, in particular that related to port facility security plans;

.2 encouraged Member States to consider becoming Parties to the 2005 SUA Protocols; and

.3 invited Member States to consider making donations to the associated trust funds to support the continued delivery of technical assistance under the Global programme for the enhancement of maritime security, the Support to the implementation of the Djibouti Code of Conduct programme, and the West and Central Africa maritime security programme; in this regard, the Committee welcomed a recent contribution of Japan of $500,000 to support the Djibouti Regional Training Centre.

Model courses related to maritime security

Model course 3.24 on Security Awareness Training for Port Facility Personnel with Designated Security Duties

4.3 The Committee recalled that MSC 98 had approved the terms of reference for the review of model course 3.24 on Security Awareness Training for Port Facility Personnel with Designated Security Duties (MSC 98/WP.9, annex 3) with a view to validation by MSC 99, appointing the Islamic Republic of Iran as course developer for the revision of the model course and Malaysia as the review group's coordinator.

4.4 In considering document MSC 99/4 (Secretariat), containing the revised model course 3.24, as well as information on the review and validation process of further maritime security-related model courses, the Committee noted general support for the revised course, and agreed to validate the revised model course 3.24 on Security Awareness Training for Port Facility Personnel with Designated Security Duties, while requesting the Secretariat to conduct a final editorial review for subsequent publication.

Revision of further model courses related to maritime security

4.5 The Committee considered whether to establish further review groups for the revision of model courses 3.20, 3.23 and 3.25 relating to shoreside security, or whether to delegate the future review and validation of all model courses related to maritime security to the HTW Sub-Committee, taking advantage of the technical expertise of the Sub-Committee.

4.6 After consideration, the Committee agreed that the future review and validation of all maritime security-related model courses should be undertaken by the HTW Sub-Committee in order to ensure consistency between ship and port facility security measures, conformity of terminology and coordination of descriptions of competences, and instructed the Sub-Committee to take into account the revised model course 3.24 when revising model courses 3.19, 3.26 and 3.27 relating to ship-side security.

4.7 The Committee noted with appreciation offers by a number of delegations to assist in the future work of the HTW Sub-Committee in this regard.

Revised guidelines on the prevention of access by stowaways

4.8 The Committee recalled that the Assembly, in adopting resolution A.1027(26) on *Application and revision of the Guidelines on the allocation of responsibilities to seek the successful resolution of stowaway cases*, had authorized both MSC and the FAL Committee to develop and adopt jointly any necessary amendments to the guidelines required as a result of the introduction of the new section 4 (Stowaways) in the annex to the 1965 FAL Convention.

4.9 The Committee further recalled that it had adopted resolution MSC.312(88) on *Revised guidelines on the prevention of access by stowaways and the allocation of responsibilities to seek the successful resolution of stowaway cases*, and the FAL Committee had adopted corresponding resolution FAL.11(37).

4.10 The Committee noted that following the adoption of amendments to the annex to the FAL Convention at FAL 40, FAL 41 had agreed to review resolution FAL.11(37) to reflect those amendments; requested the Secretariat to prepare a revised version of the Revised guidelines for consideration by FAL 42; and invited the Committee to effect consequential amendments to the Revised guidelines adopted by resolution MSC.312(88).

4.11 The Committee considered document MSC 99/4/2 (Secretariat) containing draft Revised guidelines prepared by the Secretariat, reflecting the necessary amendments in accordance with the revision to the annex to the FAL Convention adopted by FAL 40.

4.12 In this regard, the Committee noted the views of the observer from INTERTANKO with respect to remaining inconsistencies in language concerning both the time period that stowaways were left on board and the responsibility of the shipowner related to costs of removing stowaways from the ship; agreed that any such harmonization of language would fall under the remit of the FAL Committee; and invited the observer to bring their comments to the attention of FAL 42.

4.13 Following consideration, the Committee adopted resolution MSC.448(99) on *Revised guidelines on the prevention of access by stowaways and the allocation of responsibilities to seek the successful resolution of stowaway cases*, as set out in annex 14, superseding the Guidelines set out in resolution MSC.312(88), and agreed to inform FAL 42 accordingly.

Ships and port facilities not subject to the ISPS Code

4.14 The Committee considered document MSC 99/4/3 (Islamic Republic of Iran), describing the security conditions and threats for ships and port facilities not subject to the ISPS Code, and proposing measures to be taken by the Organization, Member States and ships in order to enhance maritime security and prevent unauthorized and harmful activities.

4.15 In this regard, the Committee noted that the *Non-mandatory Guidelines on security aspects of the operation of ships which do not fall within the scope of SOLAS chapter XI-2 and the ISPS Code* (MSC.1/Circ.1283) provided information and best practice guidance to Member States, other authorities with responsibility for administering non-SOLAS ships and operators of such ships; and that the Guidelines supplemented resolution 7 of the 2002 London SOLAS Conference on *Establishment of appropriate measures to enhance the security of ships, port facilities, mobile offshore drilling units on location and fixed and floating platforms not covered by the provisions of SOLAS chapter XI-2*.

4.16 The Committee also noted that the Guide to maritime security and the ISPS Code provided limited guidance on the application of maritime security measures to non-SOLAS ships and port facilities; that the ILO/IMO Code of practice on security in ports also effectively extended the ISPS Code into the wider port area; and that one of the main topics for discussion in recent maritime security technical cooperation activities delivered by the Organization had been the application of certain aspects of the ISPS Code to areas other than ISPS Code compliant port facilities, in particular those that might have an impact on ships required to comply with the Code.

4.17 In the ensuing discussion, a number of delegations expressed reservations about the proposed introduction of new measures at the international level. In this connection, the following views were expressed:

.1 any new guidelines should be non-mandatory and should be used as potentially complementary background for the management of security threats under national legal frameworks;

.2 many elements of the proposal were in conflict with the principles behind the development of the ISPS Code and needed further clarification;

.3 new obligations for the large number of diverse, smaller ports around the world needed to be proportionate to the threat and would be best dealt with by a case-by-case risk assessment;

.4 practical measures, as well as legislation, could be undertaken by Member States at the national level with respect to small non-SOLAS vessels and non-ISPS Code certified ports, which could be shared in future sessions and form the basis for further discussion;

.5 the solutions proposed in paragraph 14 of document MSC 99/4/3 could be further considered in the future;

.6 the solutions proposed in paragraph 14 of document MSC 99/4/3 were unnecessary as it was the responsibility of Member States to apply additional measures for vessels and port facilities not covered by the ISPS Code; and

.7 there was a need for a comprehensive approach to maritime security threats and awareness-raising with regard to potential threats from vessels and port facilities not covered by the ISPS Code.

4.18 Consequently, the Committee, having noted the various views expressed, invited the Islamic Republic of Iran to take them into account for any further action they might wish to take in the matter.

5 REGULATORY SCOPING EXERCISE FOR THE USE OF MARITIME AUTONOMOUS SURFACE SHIPS (MASS)

5.1 The Committee recalled that MSC 98 had agreed to include in its 2018-2019 biennial agenda and the provisional agenda for MSC 99 an output on "Regulatory scoping exercise for the use of maritime autonomous surface ships (MASS)", with a target completion year of 2020. In doing so, the Committee agreed, inter alia, that the Organization should be proactive and take a leading role in the matter and encouraged Member States and international organizations to submit proposals and comments to MSC 99 (MSC 98/23, paragraph 20.2).

5.2 The Committee noted that LEG 105, following consideration of a proposal for a new output to carry out a regulatory scoping exercise and gap analysis with respect to MASS, had:

.1 agreed to include a new output entitled "Regulatory scoping exercise and gap analysis of conventions emanating from the Legal Committee with respect to maritime autonomous surface ships (MASS)" in the biennial agenda of the Legal Committee and the provisional agenda for LEG 106, with a target completion year of 2022; and

.2 invited concrete proposals and comments on the new output and a plan of action to LEG 106 for consideration, taking into account the outcome of MSC 99 and MSC 100, so that LEG 106 would be able to start its work on the new output.

5.3 The Committee had for its consideration the following documents:

.1 MSC 99/5 (Secretariat), commenting on the regulatory scoping exercise and providing a number of actions for consideration by the Committee to guide future work, such as the establishment of a framework for the exercise, the development of a work plan, including expected deliverables, and of a coordination mechanism with other committees of the Organization, intersessional arrangements and the establishment of a cross-divisional MASS taskforce under the general coordination of the Maritime Safety Division to assist with developments related to MASS;

.2 MSC 99/5/1 (IFSMA, ITF), commenting on the regulatory scoping exercise, including the consideration of UNCLOS provisions, the involvement of relevant committees and sub-committees, the definition of different types of autonomy, the extent of human monitoring and control and human element components, the possibility of extending the target completion year of the output to 2023, and proposing that remotely controlled or unmanned ships should not be permitted to operate on international voyages until an international regulatory framework governing their operation had been adopted;

.3 MSC 99/5/2 (ICS), commenting on autonomous systems and proposing the development of a work plan for the regulatory scoping exercise, which should include, in addition to the tasks identified in paragraph 20 of document MSC 98/20/2, assessing the risks and effectiveness of different alternatives for conducting the exercise and considering the need for a holistic approach to the regulation of autonomous systems, including addressing human element, procedural and technology matters;

.4 MSC 99/5/3 (Finland et al.), providing recommendations on the identification of potential amendments to existing IMO instruments and proposing a two-step approach for the regulatory scoping exercise, consisting of identifying and categorizing IMO instruments relevant to the operation of MASS; and identifying the specific regulations which might require amendments in order to ensure that MASS are operated safely, securely and in an environmentally sound manner;

.5 MSC 99/5/4 (France), proposing a methodology for the regulatory scoping exercise, as well as definitions for autonomous ships and different levels of autonomy, and two approaches for adapting the regulatory framework for

autonomous ships, i.e. undertaking an in-depth, detailed reading of the instruments as regards the concepts of control, alarms, records, maintenance, certification and port State control; and a top-down approach, defining autonomous ships and different levels of autonomy and contemplating, accordingly, the functions of the captain and crew, and the notions of shipowner, liability and manning requirements;

.6 MSC 99/5/5 (Australia et al.), proposing an approach for the regulatory scoping exercise, including the establishment of working groups and intersessional correspondence groups to complete the output by MSC 102, draft terms of reference for a working group at MSC 99 and expected deliverables;

.7 MSC 99/5/6 (Finland), providing an analysis of definitions for different concepts and levels of autonomy suggested by the industry (Bureau Veritas, Lloyd's Register, the Norwegian Forum for Autonomous Ships (NFAS), Ramboll – Core, Rolls-Royce, UK Marine Industries Alliance);

.8 MSC 99/5/7 (China and Finland), discussing the challenges faced by MASS and the role of IMO and proposing a work plan with deliverables for the regulatory scoping exercise, the consideration of a goal-based approach, the development of interim guidelines for MASS trials on international voyages and the establishment of a mechanism for information-sharing;

.9 MSC 99/5/8 (China and Liberia), recommending to consider manned MASS (with crew on board) and unmanned MASS (without crew on board) separately and the adoption of risk assessment methods when carrying out the regulatory scoping exercise, and to prioritize the development of interim safety and environmental protection guidelines for unmanned cargo carriers;

.10 MSC 99/5/9 (Japan), commenting on the regulatory scoping exercise, in particular on the importance of the recognition of a phased development of new and advancing technologies, covering several phases between conventional ships and unmanned operations, and highlighting the importance of considering safety requirements for new and advancing technologies which could be introduced gradually leading towards MASS and forming a common understanding on the use of equivalent clauses to accommodate MASS developments;

.11 MSC 99/5/10 (ITF), commenting on the regulatory scoping exercise, and recommending a phased development to include semi-autonomous systems to support and supplement shipboard functions in conjunction with onboard human supervision and intervention; sensor and data exchange technology and communication links for shore-based monitoring of shipboard functions; and ships operating in dual mode relying on semi-autonomous systems under routine circumstances with higher levels of onboard human involvement under non-routine circumstances (e.g. navigation in congested waters, rough weather, equipment failure, or unforeseen circumstances) and phasing to shore-based rather than onboard human involvement, based on user experience, technical feasibility and cost-benefit analysis;

.12 MSC 99/5/11 (Turkey), commenting on documents MSC 99/5, MSC 99/5/2, MSC 99/5/5, MSC 99/5/8 and MSC 99/5/9, and recommending to carry out the regulatory scoping exercise in phases, giving priority to matters less likely

to lead to lengthy debates, such as manned MASS, preparing a list of tasks for relevant sub-committees and terms of reference for a cross-committee Working Group on MASS and the development of guiding principles to underpin the Committee's approach;

.13 MSC 99/5/12 (United States), commenting on document MSC 99/5/5 and recommending terms and definitions for different levels of autonomy and possible arrangements and methods of work for the regulatory scoping exercise;

.14 MSC 99/INF.3 (Denmark), providing a preliminary analysis of regulations to aid the regulatory scoping exercise, including of related instruments and regulations and regulatory barriers and recommendations;

.15 MSC 99/INF.5 (IFSMA and ITF), providing information on a survey on autonomous ships representing the views of over 1,000 maritime professionals worldwide;

.16 MSC 99/INF.8 (CMI), providing a summary of responses received from national maritime law associations to the CMI International Working Group questionnaire on unmanned ships and the work of the group on SOLAS, MARPOL, COLREG, STCW, FAL, SAR, SUA and the Salvage Convention;

.17 MSC 99/INF.13 (Finland), providing information on the establishment of a dedicated test area called "Jaakonmeri", located off the coast of Finland, for full-scale tests of autonomous ships;

.18 MSC 99/INF.14 (Japan), providing three sets of outcomes of studies conducted in Japan on mandatory regulations, i.e. SOLAS, STCW and COLREG, relating to MASS; and

.19 MSC 99/INF.16 (Norway), containing information on a presentation by Norway on the development of the autonomous containership **Yara Birkeland**.

5.4 In considering the order of discussion, the Committee identified the following main issues:

.1 framework of the regulatory scoping exercise, including objectives, methodology, instruments, type and size of ships, provisional definitions and different types and concepts of autonomy, automation, operation and manning;

.2 plan and coordination of work, including intersessional arrangements; establishment of a mechanism for sharing of information and lessons learned and liaison with other international organizations; and possible arrangements to support and coordinate the regulatory scoping exercise;

.3 further work to be conducted after the regulatory scoping exercise and proposals related to the development of guidelines or recommendations, including those proposed in documents MSC 99/5/1, MSC 99/5/7 and MSC 99/5/8;

.4 any other issues; and

.5 establishment and terms of reference for a working group.

Framework of the regulatory scoping exercise

5.5 During the consideration of the framework of the regulatory scoping exercise, the following views were expressed:

.1 concerning objectives and methodology:

.1 the exercise should not be understood as a "drafting" exercise; the focus should be on identifying relevant instruments and regulations which might have an impact on MASS operations and on assessing the degree to which the existing regulatory framework applied to the operation of increasingly automated ships;

.2 the main driver should be to increase safety with the aim of reducing the number of lives lost at sea and preventing pollution;

.3 MASS developments should be user-driven and not technology-driven;

.4 the exercise, including the work conducted by the LEG Committee, should not entail any kind of recognition or agreement by IMO with regard to the use of MASS;

.5 the aim of the exercise should be to improve shipping efficiency;

.6 there should be no reduction in the safety standards currently in place;

.7 the exercise should be conducted according to the methodology proposed in paragraph 20 of document MSC 98/20/2, namely, the identification of IMO regulations which, as currently drafted, precluded unmanned operations; regulations that would not apply to unmanned operations (as they related purely to a human presence on board); and regulations which did not preclude unmanned operations but might need to be amended in order to ensure that the construction and operation of MASS were carried out safely, securely and in an environmentally sound manner;

.8 the exercise should include the development of an inventory of regulations impacting on MASS and a broad analysis of the best way to introduce the concept of MASS within relevant IMO instruments;

.9 the following elements should be considered as part of the exercise: practical operational state of autonomous ships; evaluation of operability and reliability of autonomous systems; evaluation of safety and procedures to mitigate safety risks; consideration of necessary amendments to relevant instruments; and defining related certification procedures for autonomous ship systems;

.10 the exercise should take into consideration human element aspects, in particular those related to remote operation and related training; the impact on seafarers, both in terms of competency and training; interactions between conventional and autonomous ships (e.g. VHF

voice communications), including non-SOLAS recreational ships; data and communication systems requirements; cybersecurity; and the availability of related technologies in different countries;

.11 other aspects, such as risk and formal safety assessments, the removal of specific barriers to MASS and the use of a goal-based approach, could be considered as part of an in-depth analysis after the identification of legal barriers related to MASS or after the exercise;

.12 the exercise should be conducted in a holistic manner, taking into account opportunities and risks for safety, security and the protection of the marine environment; and

.13 the consideration of autonomous systems should be prioritized; and

.2 concerning terms and definitions:

.1 any MASS definitions and concepts of different types and levels of autonomy, automation, operation and manning should be provisional, neutral in terms of technology and developed for the purpose of the exercise only; and

.2 the development of definitions at this stage could be premature; and

.3 concerning instruments:

.1 instruments and regulations should be categorized during the exercise to facilitate the allocation of work to the responsible bodies after the exercise, as appropriate;

.2 the consideration of UNCLOS provisions could be undertaken by the Secretariat, keeping in mind that the interpretation of such provisions was the prerogative of the Parties to UNCLOS;

.3 in order to ensure consistency in the results, the regulatory scoping exercise of all IMO instruments, including those under the remit of other committees, should be conducted under the same objectives and following the same methodology; and

.4 the use of autonomous craft was expected to increase and they should be required to comply with relevant international instruments, including COLREG.

5.6 After in-depth consideration, the Committee recognized that all documents submitted under this agenda item provided relevant information and that there were a number of aspects that would benefit from further consideration by a working group. In particular, the Committee agreed with the summation of the Chair that:

.1 all documents submitted under this agenda item should be taken into consideration by the working group;

.2 the establishment of a framework was necessary in order to provide a common understanding of the work required and how it would be conducted;

.3 the application of a consistent framework by all bodies involved in the exercise would ensure consistent results;

.4 the work on MASS should be user-driven and not technology-driven;

.5 the exercise, at this stage, should be high-level and should therefore be kept at committee level;

.6 given the different interpretations of MASS, clear definitions were needed as a priority in order to move forward with the exercise;

.7 definitions should be broad and provisional to avoid limiting the exercise;

.8 the exercise should not be considered as a drafting exercise;

.9 the result of the exercise should establish which regulations, as written, applied already to MASS and which regulations might be in conflict with MASS, and should identify the relevant gaps to ensure that the safety, security and protection of the marine environment would be maintained;

.10 a clear method of work was essential;

.11 in terms of the method of work, the exercise should take a holistic approach, taking into account the human element, procedures and technology;

.12 a realistic work plan should be developed and kept updated as the work progressed; and

.13 other relevant aspects highlighted during the discussions could be further considered by the working group.

Plan and coordination of work, including intersessional arrangements

5.7 The Committee considered the following possible arrangements to support and coordinate the regulatory scoping exercise:

.1 involvement of other committees to examine and review instruments under their purview and the establishment of a coordination mechanism with other bodies of the Organization;

.2 participation of relevant sub-committees to assist with the exercise;

.3 establishment of intersessional correspondence or working groups; and

.4 requesting the Secretariat to conduct an initial review of IMO instruments and provide the results to the Committee for consideration.

5.8 In this connection, the Committee noted that, in order to contribute and facilitate coordination of work among different committees and divisions within the Secretariat, a cross-divisional MASS task force had been established under the general coordination of the Maritime Safety Division. The task force would meet periodically to review developments on MASS, coordinate the work between the different involved bodies of the Organization and provide assistance and advice, as appropriate.

5.9 During the ensuing discussion, the following views were expressed:

.1 a plan of work with clear deliverables and priorities should be developed;

.2 the Secretariat could be instructed to conduct an initial review of IMO instruments;

.3 a holistic approach was necessary involving all relevant IMO bodies and other organizations;

.4 the task force established by the Secretariat could facilitate the coordination of work among different IMO committees, monitor progress and liaise with other relevant organizations dealing with MASS in order to keep the Committee informed of developments;

.5 the Committee should be responsible for dealing with instruments under its purview;

.6 the Committee should be appointed as the overall coordinating body on the regulatory scoping exercises on MASS conducted by other IMO committees;

.7 the establishment of an intersessional working group was not required;

.8 a joint intersessional working group could facilitate the work of the committees, in particular for the analysis stage of the exercise;

.9 splinter groups should be avoided;

.10 further consideration of the need for intersessional arrangements was required before developing terms of reference for a correspondence or working group;

.11 a road map and plan of work for any future work to be conducted after the exercise, including the identification of new outputs, should be developed as part of the exercise;

.12 the involvement of sub-committees was not necessary at this stage, in particular given the current workload of some of them (e.g. NCSR Sub-Committee); and

.13 experts from all sub-committees should be involved in the analysis stage.

5.10 In this connection, the Committee also noted that ISO/TC 8 had established a Working Group 10 on Smart Shipping, as well as a task group on MASS to focus on how to share industry experience for making standards to better support the growing application of intelligent technology and the Internet of things on shipbuilding, shipping, ports and logistics; and that the next meeting of the Working Group would take place on 10 and 11 October 2018 in London, to discuss the draft road map of standardization of MASS.

Involvement of other committees and establishment of a coordination mechanism

5.11 The Committee, recalling that LEG 105 had approved a new output for the conduct of a regulatory scoping exercise on MASS for instruments under its purview, agreed that it should review only instruments under its remit and that MEPC and the FAL Committee should be

invited to contribute as appropriate, by undertaking a review of instruments under their purview. The Committee agreed that, in the future, TCC should also get involved, in particular when implementation issues would be considered.

5.12 The Committee also agreed that it should take a coordinating role and provide relevant information to other IMO committees on aspects under their responsibility needing consideration. In doing so, the Committee invited MEPC and the FAL and LEG Committees to take into account any relevant decisions made by it, in order to harmonize the results of the respective regulatory scoping exercises.

Participation of relevant sub-committees

5.13 The Committee agreed that the participation of sub-committees would not be required at this stage; however, they could be invited to consider specific technical issues under their remit in the future, as and when requested by the committee(s).

Establishment of intersessional correspondence or working groups

5.14 The Committee agreed that the establishment of an intersessional working group was not required at this stage, but that it might be reconsidered in the future; and instructed the Working Group to consider the need for a correspondence group and develop draft terms of reference, as appropriate.

Request for the Secretariat to conduct an initial review of IMO instruments

5.15 The Committee requested the Secretariat to review the work already undertaken to date by several organizations that had considered regulatory arrangements and submitted the results of their work to the Committee, and submit a consolidated report on such work for consideration by MSC 100.

5.16 The Secretary-General stated that MASS was a very important matter and was considered a big and important task for the Organization. He commended the Committee for a very positive and constructive discussion and indicated that the Secretariat would do its utmost to serve the Member States through the task force established. He requested Member States, experts and NGOs to support and collaborate with the Secretariat in order to achieve the best results.

Mechanism for sharing information with other organizations

5.17 The Committee agreed on the need for the sharing of information and lessons learned with other UN bodies, such as the Division for Ocean Affairs and the Law of the Sea of the United Nations Office of Legal Affairs (OLA/DOALOS), the International Labour Organization (ILO) and the International Hydrographic Organization (IHO), and international organizations, including the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) and the International Organization for Standardization (ISO), as proposed in document MSC 99/5/7, and instructed the Working Group to consider this matter in further detail.

Plan of work

5.18 The Committee agreed that a clear and concise plan of work for the regulatory scoping exercise should be developed, including timelines and deliverables.

Further work, including proposals related to the development of guidelines or recommendations

5.19 Given the number of related instruments and the diversity of potential issues to be considered, the Committee agreed that a coordinated plan of action for the further work after the completion of the regulatory scoping exercise should be developed under the current output, with the understanding that any future work might require the approval of new output(s), or an expansion of the existing one.

5.20 The Committee considered the following proposals regarding the development of guidelines or recommendations:

.1 a circular affirming that remotely controlled or unmanned ships were not in compliance with existing international regulations and were not permitted to operate on international voyages until an international regulatory framework governing their operation had been adopted and was in effect (MSC 99/5/1);

.2 interim guidelines for MASS trials on international voyages (MSC 99/5/7); and

.3 interim safety and environmental protection guidelines for unmanned cargo carriers (MSC 99/5/8).

5.21 With regard to the above proposals, the following views were expressed:

.1 the development of a circular stating that remotely controlled or unmanned ships were not in compliance with existing international regulations and should not be permitted to operate on international voyages could undermine the sovereignty of flag States and prevent cooperation between Member States on MASS trials in international waters;

.2 a circular recognizing that MASS were not permitted under current regulations should be developed;

.3 the *Principles of minimum safe manning* (resolution A.1047(27)) should be taken into account;

.4 trials with MASS on the high seas could generate valuable input for the further development of both technology and regulations for MASS;

.5 the development of interim guidelines for trials of MASS in particular areas, addressing, inter alia, oversight and safety issues, should be considered in order to gain experience and harmonize further developments;

.6 the NCSR Sub-Committee could consider the development of guidance for MASS trial areas;

.7 the development of any kind of interim guidelines was premature and should be considered after the regulatory scoping exercise;

.8 the development of interim guidelines for MASS trials and test areas could be further considered by a working group and could be included in the plan of action for further work;

.9 priority should be given to the regulatory scoping exercise;

.10 technology innovation should not be discouraged; and

.11 the development of interim guidelines on operational issues would require a new output.

5.22 After consideration, the Committee agreed with the Chair's summation that:

.1 there was insufficient support for the development of a circular precluding the operation of MASS; and

.2 recognizing the need for the development of guidelines, it would be difficult to draft any guidelines or recommendations without having a common understanding of the different definitions and concepts of MASS.

5.23 In this context, the Committee agreed to focus on the regulatory scoping exercise and instructed the Working Group, when considering the work plan, to consider the need for guidelines on test beds and trials for MASS and, if so, to invite submissions to MSC 100 in this respect.

Target completion year for the output

5.24 Having considered proposals to extend the target completion year for the output to 2023, the Committee agreed to maintain, for the time being, 2020 as the target completion year and to review it in the future, based on progress made with the work on the output.

Establishment of a working group

5.25 Subsequently, the Committee established the Working Group on MASS and instructed it, taking into account the Chair's summation of the comments made and decisions taken in plenary and basing its work on the scope set out in document MSC 98/20/2, as modified by MSC 98 (MSC 98/23, paragraph 20.2), to:

.1 develop a framework for the regulatory scoping exercise, including aims, objectives, methodology, instruments, type and size of ships, provisional definitions and different types and concepts of autonomy, automation, operation and manning to be considered;

.2 develop a plan of work for the regulatory scoping exercise, including timelines, deliverables and priorities, involvement of other committees and intersessional arrangements;

.3 consider the need to establish a mechanism for sharing information and lessons learned and liaison with other international organizations to share up-to-date information on MASS, and advise, as appropriate; and

.4 consider the need for a correspondence group and develop draft terms of reference, as appropriate.

Report of the Working Group

5.26 Having considered the report of the Working Group on MASS (MSC 99/WP.9), the Committee approved it in general and took action as described hereunder.

5.27 The Committee:

.1 endorsed the framework for the regulatory scoping exercise, as set out in annex 1 to document MSC 99/WP.9, as work in progress, including the aim and objective, a preliminary definition of MASS and degrees of autonomy, the list of mandatory instruments to be considered, the applicability in terms of type and size of ships, the methodology for the exercise and a plan of work;

.2 invited interested Member States and international organizations to submit proposals to MSC 100 related to the development of interim guidelines for MASS trials; and

.3 noted that no further actions were required at this stage in respect of sharing of information and lessons learned.

Establishment of a correspondence group

5.30 The Committee established a Correspondence Group on MASS, under the coordination of Finland,[2] and instructed it to:

.1 in order to test the framework, in particular the methodology agreed for the regulatory scoping exercise, as set out in annex 1 of document MSC 99/WP.9, conduct an initial consideration of SOLAS regulations III/17-1 and V/19.2 and LL regulation 10 and, if time allowed, SOLAS regulations II-1/3-4 and V/22;

.2 make suggestions for improvement, as appropriate; and

.3 submit a report to MSC 100.

5.31 In doing so, the Committee authorized the Correspondence Group to commence its work as soon as possible and submit its report to MSC 100 by the second deadline for submissions (nine-week deadline), providing results of the test of the framework in an annex, in English only.

6 GOAL-BASED NEW SHIP CONSTRUCTION STANDARDS

Background

6.1 The Committee recalled that MSC 98, after considering the goal-based standards (GBS) non-conformities verification audit report (MSC 98/6/1), had concluded that the rectification of the identified non-conformities had been duly accomplished and that the whole

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process of the initial verification audit had been successfully completed in accordance with the *Guidelines for verification of conformity with goal-based ship construction standards for bulk carriers and oil tankers* (GBS Verification Guidelines) (resolution MSC.296(87)).

6.2 The Committee also recalled that MSC 98 had tentatively scheduled the adoption of amendments to parts A and B of the GBS Verification Guidelines for MSC 100, according to the revised timetable and schedule of activities for the implementation of the GBS verification scheme (MSC 98/23, paragraphs 6.21 and 6.22).

Progress report on the work related to GBS

6.3 The Committee noted the information provided in documents MSC 99/6 and MSC 99/INF.9 (Secretariat), giving an updated status report on recognized organizations' (ROs) Corrective Action Plan addressing GBS audit observations during the initial GBS verification audits; together with MSC 99/INF.19 (IACS), providing an updated status of work to address the IACS "common" observations, as of 28 February 2018.

6.4 The Committee also noted that, after successful completion of the initial GBS verification audit, IACS and its 12 member ROs had submitted their request for the first GBS maintenance of verification audit in accordance with the revised timetable and schedule of activities for the implementation of the GBS verification scheme (MSC 98/WP.7, annex 2) and that the team for the maintenance of verification audit had subsequently been established by the Secretary-General.

6.5 In considering the costs for the first GBS maintenance of verification audits, the Committee noted that the remaining funds stemming from the accumulated fees for the initial verification audits were sufficient for conducting the first audit. In this regard, the Committee also noted that the Secretariat would provide an analysis of the costs for the first maintenance audit after its completion to MSC 100.

6.6 In respect of future GBS verification audits, the Committee, recognizing the importance of having a sustainable pool of GBS audit experts available and noting the current shortage of such experts, encouraged Member States and international organizations to nominate experts for inclusion in the list of GBS auditors, in accordance with Circular Letter No.3076.

6.7 In concluding the discussion of the progress reports on the GBS verification audits, the Committee invited IACS to provide an update on the progress made regarding their audit observations to MSC 101.

Draft amendments to the GBS Verification Guidelines

Matters related to the maintenance of verification

6.8 The Committee recalled that MSC 98 had endorsed, in principle, the draft amendments to part A of the GBS Verification Guidelines, subject to editorial review, and changes emanating from the revision of part B and from the consideration of documents submitted to this session relating to maintenance of verification approaches other than those included in draft part A (MSC 98/23, paragraph 6.21).

6.9 The Committee had the following documents for its consideration:

.1 MSC 99/6/2 (IACS), expressing support for a three-year cycle for the GBS maintenance of verification audits, as proposed by the GBS Working Group at MSC 98 (MSC 98/WP.7), as well as supporting, in principle, any alternative proposal that established audit frequencies based on substantive changes to the rules, or new rules that had wide-reaching impact, rather than adhering to a fixed time schedule; and

.2 MSC 99/6/3 (Germany), proposing a qualitative approach to evaluate the need for conducting a maintenance audit depending on the impact of the submitted rule changes, instead of only using a quantitative 10% criterion.

6.10 In considering the aforementioned proposals, the Committee noted, inter alia, the following views:

.1 it was not appropriate to apply a fixed three-year cycle; an impact study should be carried out instead as the basis for deciding on the need for a maintenance audit;

.2 the categorization of rule changes, particularly category 3 (major rule changes), provided flexibility to the audit scheme and addressed the concerns of the industry and Administrations;

.3 the 10% maintenance of verification criterion should be replaced by qualitative criteria based on the impact of the rule changes; and

.4 if a three-year cycle was supported, then such a provision should be based on two conditions:

.1 in the case that an Administration was of the opinion that rule changes would result in a non-conformity with GBS, the Committee should review those rule changes; and

.2 the Committee was to be informed of all major rule changes.

6.11 The observer from IACS highlighted the need for clarity with respect to the categorization criteria, as proposed in document MSC 99/6/3, and also on the periodicity of the audits in accordance with such categorization. Furthermore, the guidelines should also provide the required clarity for both the industry and the Organization on the status of the rules at any time, address the possible overlap of two consecutive audits and detail how the notification to Administrations of rule changes by submitters should be conducted.

6.12 Following discussion, the Committee agreed, in principle, to a three-year verification cycle, allowing for some flexibility in this respect by utilizing the qualitative approach, bearing in mind that the GBS verification should be an efficient, effective and transparent process.

6.13 Subsequently, the Committee agreed to refer documents MSC 99/6/2 and MSC 99/6/3 to the GBS Working Group for consideration, with a view to finalization of the relevant draft amendments to the GBS Verification Guidelines.

Draft Interim guidelines for development and application of IMO goal-based standards safety level approach (GBS-SLA)

6.14 The Committee considered document MSC 99/6/1 (IACS), proposing to amalgamate sections 13 and 14 of the draft Interim guidelines for development and application of IMO goal-based standards safety level approach (GBS-SLA) (MSC 98/WP.7, annex 3) into a single section to ensure that an unambiguous and reproducible GBS-SLA output was achieved to support the IMO rule-making process, applying the Formal Safety Assessment (FSA) method.

6.15 While the aforementioned proposal by IACS was supported, a view was expressed that the "As Low As Reasonably Practical (ALARP)" principle was not included in the proposed table and, therefore, the area of the F-N diagram between ALARP and the line defining the area of intolerable risk would not be addressed, which could influence the functional requirements and/or expected performances.

6.16 After further discussion, having noted the general support for the proposal, the Committee agreed to refer document MSC 99/6/1 to the GBS Working Group for further consideration, with a view to finalization of the Interim guidelines.

Establishment of the GBS Working Group

6.17 Having considered the above matters, the Committee established the Working Group on Goal-based Standards and instructed it, taking into account the comments and decisions made in plenary, to:

.1 finalize the draft amendments to the GBS Verification Guidelines (resolution MSC.296(87)), based on annex 1 to document MSC 98/WP.7, taking into account documents MSC 99/6/2 and MSC 99/6/3;

.2 finalize the draft Interim guidelines for development and application of IMO goal-based standards safety level approach (GBS-SLA), based on annex 3 to document MSC 98/WP.7, taking into account document MSC 99/6/1; and

.3 update the revised timetable and schedule of activities for the implementation of the GBS verification scheme (MSC 98/WP.7, annex 2), as necessary.

Report of the Working Group

6.18 Having considered the report of the Working Group (MSC 99/WP.8), the Committee took action as described hereunder.

Draft amendments to the GBS Verification Guidelines

6.19 The Committee approved, in principle, the draft MSC resolution on *Revised guidelines for verification of conformity with goal-based ship construction standards for bulk carriers and oil tankers*, as set out in annex 1 to document MSC 99/WP.8, with a view to subsequent adoption at MSC 100; and agreed that it should take effect one year after adoption. In this connection, the Committee also agreed with the Group's conclusion that the Revised guidelines would require periodical review, taking into account the experience gained with the auditing process over time.

Revised timetable and schedule of activities for the implementation of the GBS verification scheme

6.20 The Committee, having agreed to a three-year cycle for the maintenance of verification audits, endorsed the *Revised timetable and schedule of activities for the implementation of the GBS verification scheme*, as set out in annex 15.

Interim guidelines for development and application of IMO goal-based standards safety level approach

6.21 The Committee approved, in principle, the draft Interim guidelines for development and application of the IMO goal-based standards safety level approach, as set out in annex 3 to document MSC 99/WP.8, for consideration at MSC 100 with a view to approval, and requested the Secretariat to prepare the associated draft MSC circular.

7 SAFETY MEASURES FOR NON-SOLAS SHIPS OPERATING IN POLAR WATERS

7.1 The Committee recalled that MSC 98, having considered the outcome of SDC 4 on matters related to the second phase of work on the Polar Code, agreed to:

.1 change the title of this output to "Safety measures for non-SOLAS ships operating in polar waters"; and

.2 taking into account the urgency of this issue, moved the output from its post-biennial agenda to the 2018-2019 biennial agenda and the provisional agenda of MSC 99, with a view to taking a policy decision regarding the scope of application of the second phase of work on the Polar Code, its mandatory or recommendatory status and types of vessels to be addressed.

7.2 In connection with the above, the Committee had for its consideration the following documents:

.1 MSC 99/7 (Norway), discussing the lack of a legal framework to allow for mandatory application of the whole of the Polar Code to non-SOLAS vessels and proposing some possible safety measures that could be achieved under the current framework. In this context, Norway advocated the urgent need for Member States to ratify the 2012 Cape Town Agreement, which, once in force, would significantly improve the safety of fishing vessels regardless of area of operation, including polar waters. Noting that the Polar Code was an add-on to SOLAS, aimed at addressing gaps in the safety level between ships operating outside and inside polar waters, Norway proposed to instruct the NCSR Sub-Committee to consider the wider application of chapters 9 to 11 of part I-A of the Code and develop necessary amendments to SOLAS and/or the Code, as appropriate;

.2 MSC 99/7/1 (Chile and New Zealand), proposing mandatory application of the safety measures in the Polar Code to all non-SOLAS vessels operating in polar waters and, in particular, proposing that a working group be established at this session to discuss a potential timeline for the work to be undertaken and decide on the need to establish relevant correspondence groups to expedite the work and assist SDC 6;

.3 MSC 99/7/2 (Pew), emphasizing that the 2012 Cape Town Agreement could provide safety measures for fishing vessels operating in polar waters once it entered into force, ensuring that such measures would be binding. Therefore, Pew encouraged the ratification of the Agreement to raise the safety standards of all fishing vessels operating in polar waters and to combat IUU fishing; and

.4 MSC 99/7/3 (FOEI et al.), providing updated information which indicated that over 600 fishing vessels operated in the polar regions and the number of yachts sighted in the Antarctic had increased in recent years. Such non-SOLAS vessels, in the view of the co-sponsors, needed to be brought under the umbrella of an international regime in order to ensure standard levels of compliance and operations within vessel capability, in particular ice conditions, general seaworthiness and fit for purpose operation in polar conditions, in order to lower risk and reduce pressure on existing and future port/coastal State capabilities. Therefore, the co-sponsors encouraged Member States to ratify the 2012 Cape Town Agreement, as this would provide a legal framework to enforce implementation of the Polar Code.

7.3 The Committee noted with appreciation the information contained in document MSC 99/INF.17 (New Zealand), providing casualty data for fishing vessels and yachts regularly operating in waters surrounding the Antarctic to support the work on this output.

7.4 In considering the above documents, the Committee noted the following views:

.1 accidents involving non-SOLAS ships operating in polar waters, particularly in the Antarctic area, had continued to pose a significant risk to the safety of lives at sea and a threat to the marine environment and urgent action needed to be taken now rather than waiting for experience to be gained with the implementation of the Polar Code;

.2 taking into account all the IMO instruments that could be considered for application to non-SOLAS ships which were mandatory, recommendatory or not yet in force, a combined and/or staged approach could be taken when developing the legal framework for addressing the safety of non-SOLAS ships operating in polar waters;

.3 IMO safety-related instruments had been developed for application to SOLAS ships and, therefore, any safety measures for non-SOLAS ships must be both proportionate and feasible to implement;

.4 extending the Polar Code to non-SOLAS ships might be a very complex undertaking and, therefore, the way forward proposed in document MSC 99/7 provided a good basis to begin the work; and

.5 the operational differences and challenges encountered in Arctic waters and the Antarctic area needed to be thoroughly considered when developing both the legal framework and the safety measures.

7.5 The Committee, having noted that the majority of those who spoke had highlighted the importance of the 2012 Cape Town Agreement to ensure the safety of fishing vessels, also encouraged Member States to ratify the Agreement as soon as possible in order to raise the safety standards of all fishing vessels operating in polar waters and on the high seas.

7.6 In the context of the above, the Committee further noted the following:

.1 the delegation of Belgium advised that they had deposited an instrument of accession to the 2012 Cape Town Agreement and the 1995 STCW-F Convention on 10 May 2018;

.2 the delegation of the Cook Islands advised that their Government had initiated the ratification process for the Agreement; and

.3 the delegation of Spain advised that the Spanish Ministry of Foreign Affairs and Cooperation had sent the ratification file for the 2012 Cape Town Agreement to Parliament in April 2018, as part of the internal process of ratification. The full text of their statement is set out in annex 26.

7.7 In responding to the above information, the Secretary-General emphasized the importance of the Agreement for the safety of fishers and fishing vessels, in particular for those operating in polar waters, and highlighted the need for more effective communication between fisheries and transport ministries. In referring to the latest status of the Agreement, he informed the Committee that, as of 17 May 2018, the Agreement had 10 Contracting States, representing 1,020 fishing vessels, noting that the Agreement would enter into force 12 months after the date on which not less than 22 States, the aggregate number of whose fishing vessels of 24 m in length and over operating on the high seas was not less than 3,600, had expressed their consent to be bound by it. The Secretary-General also informed the Committee that the Secretariat was preparing a revised strategy to support the entry into force of the Agreement and invited interested Member States and international organizations to contact the Secretariat in this regard, if they so wished.

7.8 Following discussion, the Committee:

.1 noted a strong desire for the 2012 Cape Town Agreement to enter into force, having received information from several Member States regarding their ratification of the Agreement;

.2 recognized the merit of increasing the safety-level for non-SOLAS ships operating in polar waters and that, in order to achieve this, a practicable legal framework was needed, whereby the proposal by Norway (MSC 99/7) would be a good starting point for discussion;

.3 noted that a new legal framework could be a combination of mandatory and recommendatory measures;

.4 agreed that any measures taken by the Committee with regard to non-SOLAS ships needed to be proportionate, reasonable, pragmatic and flexible;

.5 agreed that the challenges associated with Arctic waters and the Antarctic area were different and, therefore, these differences needed be taken into account when deciding on the scope of application of any safety measures; and

.6 noted the support for the establishment of a working group to consider these issues with a view to developing a road map, identifying priorities, time frames and responsibilities for the work to be accomplished.

Establishment of a working group

7.9 Having considered the above issues, the Committee established a Working Group on Safety Measures for Non-SOLAS Ships Operating in Polar Waters and instructed it, taking into account the comments made and decisions taken in plenary and documents MSC 99/7, MSC 99/7/1, MSC 99/7/2, MSC 99/7/3 and MSC 99/INF.17, to:

.1 consider the scope of application (i.e. Arctic waters and/or Antarctic area) of the further work on safety measures for non-SOLAS ships operating in polar waters and advise the Committee accordingly;

.2 consider the types of ships (e.g. fishing vessels and yachts) to be addressed and advise the Committee accordingly;

.3 consider the mandatory and/or recommendatory status of any safety measures and advise the Committee accordingly; and

.4 prepare a road map, identifying priorities, time frames and responsibilities for the work to be accomplished, for consideration by the Committee.

Report of the Working Group

7.10 Having considered the report of the Working Group (MSC 99/WP.10), the Committee approved it in general and took action as described hereunder.

7.11 In considering the geographical scope of application of the work on safety measures for non-SOLAS ships, the Committee noted the following views:

.1 the scope of application for safety measures should not be limited to international voyages;

.2 mandatory safety measures should only apply to non-SOLAS vessels operating in polar waters on international voyages;

.3 recommendatory safety provisions could have a wider application, including for both domestic and international voyages;

.4 resolution MSC.385(94), by which the safety-related provisions of the Polar Code were adopted, in paragraph 4, invites Contracting Governments to consider the voluntary application of the Code, as far as practicable, also to ships not covered by the Code and operating in polar waters; and

.5 any safety measures for fishing vessels should be mandatory in polar waters.

7.12 In the context of the above, the Committee noted a statement by the delegation of New Zealand regarding the geographical scope of application, more specifically the application of safety measures to non-SOLAS vessels operating in polar waters on international voyages. The full text of the statement is set out in annex 26.

7.13 Consequently, the Committee agreed that:

.1 any safety measures for non-SOLAS vessels should, in principle, apply to both Arctic waters and the Antarctic area;

.2 when considering specific safety measures for each type of vessel, it was necessary to consider the area of application on a case-by-case basis as there was a possibility that exemptions/exceptions might apply; and

.3 any recommendatory measures for polar waters operation should not be limited to international voyages only.

7.14 The Committee, in considering the types of vessels to be addressed in the development of safety measures for non-SOLAS ships operating in polar waters, noted the following views:

.1 the work on this output was very complex and there were still many concerns with regard to the application of safety measures, in particular mandatory measures, and guidance could be developed initially to allow more time for consideration;

.2 taking into account the urgency of the matter:

.1 a working group should be established at MSC 100 to further consider matters related to safety measures for non-SOLAS vessels operating in polar waters, with a view to providing clear instructions for the NCSR and SDC Sub-Committees to commence their work; and

.2 the development of recommendatory safety measures should commence in the relevant sub-committee, while the Committee reached a clear decision with regard to mandatory safety measures;

.3 guidance should be developed initially to allow time for a more robust mechanism to be developed;

.4 at this stage, it was premature to refer any work related to this output to the NCSR Sub-Committee; and

.5 the table on the existing regulatory provisions for non-SOLAS vessels operating in polar waters (MSC 99/WP.10, annex 1) prepared by the Group could be used in future discussions.

7.15 Consequently, the Committee, having decided that further consideration of matters related to this output was necessary at the Committee level, agreed:

.1 not to refer the table on the existing regulatory provisions for non-SOLAS ships operating in polar waters (MSC 99/WP.10, annex 1) to the NCSR and SDC Sub-Committees, at this stage;

.2 that the types of vessels to be considered in the development of safety measures for non-SOLAS ships operating in polar waters were fishing vessels; pleasure yachts above 300 gross tonnage not engaged in trade; and cargo ships below 500 gross tonnage down to 300 gross tonnnage;

.3 that there was a need for a pragmatic and flexible approach, exploring all possibilities before embarking on the development of any mandatory or recommendatory safety measures under this output; and

.4 not to instruct the NCSR Sub-Committee to take any action at this stage.

7.16 Following discussion, the Committee, recognizing the importance and urgency of the matter:

.1 included the output on "Safety measures for non-SOLAS ships operating in polar waters" in the biennial agenda of the SDC Sub-Committee and the provisional agenda for SDC 6;

.2 instructed SDC 6 to develop recommendatory safety measures for the following types of ships operating in polar waters:

.1 fishing vessels of 24 m in length and over, with a view to alignment with the 2012 Cape Town Agreement; and

.2 pleasure yachts above 300 gross tonnage not engaged in trade;

and

.3 invited interested Member States and international organizations to submit concrete proposals to SDC 6.

7.17 The Committee also agreed to establish a working group at MSC 100 to further consider outstanding issues; provide clear instructions to the NCSR Sub-Committee; and further consider the road map prepared by the group (MSC 99/WP.10, annex 2); and invited Member States and international organizations to submit proposals addressing the aforementioned issues to MSC 100.

8 CARRIAGE OF CARGOES AND CONTAINERS

Report of CCC 4

8.1 The Committee approved, in general, the report of the fourth session of the Sub-Committee on Carriage of Cargoes and Containers (CCC) (CCC 4/12 and MSC 99/8) and took action as indicated in paragraphs 8.2 to 8.13 below.

Standards for methyl/ethyl alcohol as a marine fuel and for methyl/ethyl alcohol fuel couplings

8.2 The Committee agreed to invite ISO to develop:

.1 a standard for methyl/ethyl alcohol as a marine fuel; and

.2 a standard for methyl/ethyl alcohol fuel couplings,

and requested the Secretariat to communicate with the ISO Secretariat accordingly.

8.3 In this regard, the observer from ISO expressed their willingness to develop these standards, but pointed out that there was a lack of sufficient use of such a fuel and industry was short of experience. In this context, the Committee noted the view of the delegation of the Cook Islands that the appropriate IMO legislation should be developed prior to the development of the ISO standards, which should take into account the safety concerns associated with the low flashpoint and volatile nature of methyl/ethyl alcohol as a marine fuel.

Draft amendments to parts A and A-1 of the IGF Code

8.4 The Committee considered the draft amendments to parts A and A-1 of the International Code of Safety for Ships using Gases or other Low-flashpoint Fuels (IGF Code) prepared by CCC 4, together with document MSC 99/8/1 (Denmark), commenting on the draft amendments to regulation 9.5 of the Code (CCC 4/12, annex 1) and suggesting the inclusion of an alternative solution to protect against leakage from liquefied fuel pipes outside machinery space, i.e. to amend regulation 9.5.6 by using similar wording to regulation 9.5.4; and noted the following views:

.1 some delegations were of the view that a drip tray would not be an equivalent solution to a secondary enclosure for liquefied fuel pipes on an open deck as it would not safely contain spray from a leaking pressurized liquefied fuel pipe and it would not be gas tight; while other delegations were of the view that a drip tray would allow for easy inspection and maintenance of the pipeline and, in case of leakage, would minimize the risk of injury to personnel, damage to the ship and prevent pressure build-up in an enclosure in case of leakage;

.2 the draft requirement in paragraph 9.5.6 (CCC 4/12, annex 1) was too restrictive and alternative solutions providing an equivalent safety level as accepted by the Administration should be included;

.3 a differentiation between the requirements for gaseous fuel pipes and for liquefied fuel pipes was proposed explicitly in document CCC 4/3/1 (IACS);

.4 exposure to sea spray, rain, icing and other environmental conditions should be taken into account in order to reduce the possibilities of pipe corrosion and to increase the efficiency of insulation, and proper protection of the ship from cryogenic leakages and subsequent control of large volumes of potentially vaporized gas should be provided;

.5 the alternative solutions in paragraph 9.5.4 referred to requirements for ventilation and gas detection in the secondary enclosure, and not to alternative solutions for the secondary enclosure itself;

.6 requirements for a secondary enclosure for bunkering lines on the open deck would not be necessary as these lines would be free of gas in accordance with paragraph 8.5.5 of the IGF Code; and

.7 existing regulations regarding alternative design under chapter 2.3 of the IGF Code should be taken into account.

8.5 Following the discussion, the Committee agreed to hold the approval of the draft amendments to parts A and A-1 of the IGF Code in abeyance and instructed CCC 5, taking into account the above views and document MSC 99/8/1, to reconsider the draft amendments to regulation 9.5.6 and report the outcome to MSC 100 as an urgent matter.

Editorial corrections to the IGF Code

8.6 The Committee authorized the Secretariat to effect the editorial corrections to sections 6.14.16 (paragraph numbering) and 16.7.2 (incorrect reference) of the IGF Code agreed by CCC 4 (CCC 4/12, paragraph 3.45), using the established procedure for correcting errors of an editorial nature via a Note Verbale of Rectification.

Carriage of Bauxite which may liquefy

8.7 Having noted the urgency for the information to be available to all stakeholders, the Committee endorsed the decision of the Sub-Committee to issue CCC.1/Circ.2/Rev.1 on *Carriage of Bauxite which may liquefy*.

Carriage of AMMONIUM NITRATE BASED FERTILIZER (non-hazardous)

8.8 Having noted the urgency for the information to be available to all stakeholders, the Committee endorsed the decision of the Sub-Committee to issue CCC.1/Circ.4 on *Carriage of AMMONIUM NITRATE BASED FERTILIZER (non-hazardous)*.

Draft amendments (05-19) to the IMSBC Code

8.9 The Committee endorsed the Sub-Committee's authorization of E&T 29 to prepare draft amendments (05-19) to the International Maritime Solid Bulk Cargoes Code (IMSBC Code), for submission to CCC 5.

Draft amendments (39-18) to the IMDG Code and associated circulars

8.10 The Committee recalled that the draft amendments (39-18) to the IMDG Code (MSC 99/3/Add.1) and the draft consolidated Revised Emergency Response Procedures for Ships Carrying Dangerous Goods (EmS Guide) (MSC 99/3/Add.2), as finalized by E&T 28 directly after CCC 4, had been considered under agenda item 3 (see paragraphs 3.74 and 3.81).

Unified interpretations of the IGC and IGF Codes

8.11 The Committee approved MSC.1/Circ.1590 on *Unified interpretation of paragraph 13.3.5 of the IGC Code* and MSC.1/Circ.1591 on *Unified interpretation of the IGF Code*.

8.12 Following the approval of the above-mentioned unified interpretations, the Committee instructed Ill 5 to consider consequential updates to the *Survey Guidelines under the HSSC*, *2017* (resolution A.1120(30)).

Thirtieth meeting of the E&T Group (IMSBC Code)

8.13 The Committee approved the holding of the thirtieth meeting of the E&T Group, to take place directly after CCC 5, with a view to finalizing the next set of draft amendments (05-19) to the IMSBC Code, for submission to MSC 101 with a view to adoption (see also paragraph 20.35.2).

9 IMPLEMENTATION OF IMO INSTRUMENTS

REPORT OF III 4

9.1 The Committee approved, in general, the report of the fourth session of the Sub-Committee on Implementation of IMO Instruments (III 4/15 and Add.1 and MSC 99/9) and, taking into account relevant decisions and comments made by MEPC 72 (MSC 99/2/4), took action as indicated in paragraphs 9.2 to 9.40 below.

Release of marine safety investigation reports to the public

9.2 Following the release of marine safety investigation reports to the public, by default, in the module on Marine Casualties and Incidents (MCI) of the Global Integrated Shipping Information System (GISIS), the Committee concurred with III 4's invitation to the Sub-Committee on Human Element, Training and Watchkeeping (HTW) to advise Member States on the release and the availability of these reports for the benefit of seafarers' training and education.

Assembly resolutions prepared by the III Sub-Committee

9.3 Having recalled that MSC and MEPC had authorized the Sub-Committee to report the outcome of its work on matters that would require the adoption of Assembly resolutions directly to A 30, the Committee noted that the Assembly adopted the following resolutions:

.1 A.1117(30) on *IMO Ship Identification Number Scheme*, revoking resolution A.1078(28);

.2 A.1119(30) on *Procedures for port State control, 2017*, revoking resolution A.1052(27);

.3 A.1120(30) on *Survey Guidelines under the Harmonized System of Survey and Certification (HSSC), 2017*, revoking resolution A.1104(29); and

.4 A.1121(30) on *2017 Non-exhaustive list of obligations under instruments relevant to the IMO Instruments Implementation Code (III Code)*, revoking resolution A.1105(29).

Application of requirements of non-mandatory instruments under port State control

9.4 Having considered the decision by III 4 to delete the references to the non-mandatory Code for the Construction and Equipment of Mobile Offshore Drilling Units, 2009 (2009 MODU Code) and Code of Safety for Special Purpose Ships, 2008 (2008 SPS Code) in appendix 12 of the *Procedures for port State control, 2017*, the Committee confirmed that the corresponding appendix of the Procedures, containing the list of certificates and documents, should only include references to mandatory instruments.

Updates of ECDIS

9.5 Having noted a statement by the delegation of the Russian Federation, as set out in annex 26, in particular on concerns of a legal nature when requiring port State control officers (PSCOs) to apply a pragmatic and practical approach, the Committee endorsed the issuance of III.2/Circ.2 on *Action to be taken by port States on the required updates of ECDIS* and considered matters related to the circular further under agenda item 12 (Navigation, communications and search and rescue) (see paragraphs 12.29 to 12.31).

Outcome of the third session of the Joint FAO/IMO Ad Hoc Working Group on Illegal, Unreported and Unregulated Fishing and Related Matters

9.6 The Committee considered the outcome of the detailed review of the recommendations of the third session of the Joint FAO/IMO Ad Hoc Working Group on Illegal, Unreported and Unregulated Fishing and Related Matters (JWG 3) relevant to the Organization, which had been carried out by III 4 at the request of MEPC 70 and MSC 97, and took decisions as described in the following paragraphs.

FAO Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing

9.7 The Committee, concurring with the decisions of MEPC 72, requested the Secretariat to contribute to the promotion of the implementation of the FAO Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing and the organization of joint capacity-development programmes.

9.8 In addition, the Committee, concurring with the decisions of MEPC 72, encouraged port State control regimes to implement the Agreement in a coordinated way with other types of inspections which might be carried out on ships to which both IMO requirements (i.e. requirements of SOLAS chapter V, MARPOL and STCW-F, for fishing vessels, and IMO requirements for cargo ships considered as "fishing vessels" under the Agreement) and the Agreement, applied.

Records on fishing vessel fleets and Ship Identification Number Scheme

9.9 With regard to the collection of records on fishing vessel fleets and the application of the *IMO Ship Identification Number Scheme* (resolution A.1117(30)) to fishing vessels, the Committee concurred with the decisions of MEPC 72 and requested the Secretariat to:

.1 continue participating in the FAO Global Record Informal Open-Ended Technical and Advisory Working Group (Global Record Working Group);

.2 further develop existing GISIS functionalities, with the support of the FAO Secretariat, to host a database of national contact points, to be used in the context of the Ship Identification Number Scheme, for the identification of the relevant segments of the national fleets of fishing vessels of less than 100 gross tonnage, down to a size of 12 m length overall, operating outside the waters under national jurisdiction of the flag State; and to update the Committees and the III Sub-Committee on progress made; and

.3 consider the need to develop a new data exchange mechanism specific to fishing vessels of less than 100 gross tonnage; and to update the III Sub-Committee on the outcome of its consideration, with a view to informing the Committees and the Council accordingly.

FAO Voluntary Guidelines for Flag State Performance

9.10 The Committee concurred with the decision of MEPC 72 to invite FAO to share information regarding the implementation of the FAO Voluntary Guidelines for Flag State Performance (VGFSP) and to explore how they could be implemented effectively in conjunction with relevant instruments adopted by IMO and ILO. Consequently, the Committee requested the Secretariat to cooperate with the ILO Secretariat, as appropriate.

9.11 In this connection, the Committee, concurring with the decisions of MEPC 72, requested the Secretariat to assist FAO in exploring how the implementation of the VGFSP could be further facilitated, based on the experience gained in administering the IMO Member State Audit Scheme.

9.12 With regard to the referencing of the VGFSP in III Code-related instruments, the Committee, concurring with the decisions of MEPC 72, instructed the III Sub-Committee to further consider the matter, including identifying which instruments, and where in those instruments, a reference to the VGFSP could potentially be included, and to advise the Committees accordingly.

9.13 Concurring with the decisions of MEPC 72, the Committee agreed to include, in the terms of reference for the next session of the Joint Working Group, an item on further consideration of actions to be triggered by IMO and FAO with regard to ocean governance in the context of Sustainable Development Goal 14 and its targets related to the work of the two organizations (see paragraph 9.36).

Piracy, armed robbery against ships and other security-related issues

9.14 With respect to making information on piracy, armed robbery against ships and other security-related issues which might be relevant to the fisheries sector available to FAO Members and regional fisheries bodies (RFBs), the Committee requested the Secretariat to develop a hyperlink between the GISIS module on Piracy and Armed Robbery and FAO data systems, as appropriate.

9.15 In this regard, the Committee encouraged the implementation of the *Best Management Practices for Protection against Somalia Based Piracy* (MSC.1/Circ.1339, annex 2) on fishing vessels and, in particular, its Annex F on *Additional Guidance for Vessels Engaged in Fishing*.

Marking of fishing gear

9.16 The Committee noted that MEPC 72, in relation to the adoption of the text of the Voluntary Guidelines for the Marking of Fishing Gear by the FAO Technical Consultation on the Marking of Fishing Gear, to be considered by the FAO Committee on Fisheries (COFI) at its thirty-third session, had encouraged the marking of fishing gear, emphasizing that the discarding of fishing gear at sea was in contravention of the relevant requirements of MARPOL Annex V and the London Convention and its Protocol. In this connection, the Committee also noted that MEPC 72 had approved a new output on "Development of an action plan to address marine plastic litter from ships".

Navigational hazards caused by marine litter

9.17 With regard to the Sub-Committee's consideration of navigational hazards caused by marine litter, including abandoned, lost or otherwise discarded fishing gear, e.g. abandoned, lost or discarded fish aggregating devices (FADs), to be addressed in collaboration with FAO, the Committee invited interested delegations to consider submitting a relevant proposal for a new output, in accordance with the Committees' method of work (MSC-MEPC.1/Circ.5).

2012 Cape Town Agreement and related instruments

9.18 Concerning the facilitation of Member States' accession to the 2012 Cape Town Agreement and its implementation, the Committee considered the request for the Secretariat to take any additional measures, as might be required (see resolution A.1107(29)), together with the request for the strengthening of technical cooperation activities, in particular activities on gap analysis, understanding of the challenges to becoming Parties, assistance for national legislation and institutional arrangement, awareness-raising campaigns and national and international conferences, including at ministerial level.

9.19 In this context, the Committee further considered the following requests for the Secretariat to:

.1 consider organizing international events for a focused consideration of the entry into force of the 2012 Cape Town Agreement;

.2 provide the conclusions or recommendations of regional/sub-regional seminars on the ratification and implementation of the 2012 Cape Town Agreement, in particular the seminars held in Belize, the Cook Islands, Costa Rica, Côte d´Ivoire, Indonesia, Morocco and Peru, for further discussion and analysis in the Organization; and

.3 share mutually, with the FAO Secretariat, information on processes relevant to the accession to the 2012 Cape Town Agreement which might support and facilitate the entry into force of the instrument (see paragraph 9.21).

9.20 In this connection, the Committee noted information provided orally by the Secretariat on some of the 2018 activities aimed at encouraging the ratification of the 2012 Cape Town Agreement, additional to the 2017 activities highlighted in document MSC 99/21 (Secretariat) (see paragraph 21.1), in particular the holding of the joint FAO/AOS[3]/ILO/IMO Regional Technical Seminar in Manila (Philippines), in March 2018; the participation at the Fifth International Fishing Industry Safety and Health Conference (IFISH 5) in St. John's (Canada), in June 2018; and the representation at COFI 33 in order to address issues related to the entry into force and implementation of relevant IMO instruments; and requested the Secretariat to inform the Committee with regard to any relevant conclusions or recommendations from seminars on the ratification and implementation of the 2012 Cape Town Agreement, as appropriate.

9.21 The Committee invited Member States to provide information on their experience with regard to difficulties in the process of ratifying or acceding to the 2012 Cape Town Agreement for consideration. Similarly, the Committee also invited Member States of IMO and FAO and regional organizations to share information on such processes which might support and facilitate the entry into force of the instrument (see paragraph 9.19.3).

9.22 Taking into account its earlier invitation to submit information on difficulties and good practices in the process of ratifying or acceding to the 2012 Cape Town Agreement (see paragraph 9.20), the Committee deferred further consideration of the strengthening of related technical cooperation activities, including the requests presented in paragraphs 9.18 and 9.19, to a future session.

9.23 With regard to the *Guidelines to assist competent authorities in the implementation of Part B of the Code of Safety for Fishermen and Fishing Vessels*, the *Voluntary guidelines for the design, construction and equipment of small fishing vessels* and the *Safety recommendations for decked fishing vessels of less than 12 metres in length and undecked fishing vessels*, the implementation of which might be useful in the context of the 2012 Cape Town Agreement, the Committee invited Member States to make use of these non-mandatory instruments, as appropriate, and to report thereon, using the facility in the GISIS module on Non-mandatory instruments.

[3] AOS: Apostleship of the Sea.

VMS, AIS and LRIT

9.24 The Committee, having noted that the Sub-Committee had considered the recommendation by Joint Working Group 3 that IMO and FAO pursue the sharing of experience in the development and maintenance of systems such as vessel monitoring systems (VMS), automatic identification systems (AIS) and long-range identification and tracking (LRIT) systems, concurred with the view that, currently, given financial considerations, LRIT would not be economically feasible to be used on board fishing vessels.

9.25 In this context, the Committee invited interested delegations, in cooperation with FAO, to provide further information on the use of AIS aboard commercial fishing vessels and to share experience gained in the development and maintenance of VMS, in terms of their use for the safety of navigation, for consideration by Joint Working Group 4.

STCW-F Convention and FAO/ILO/IMO Document for Guidance on Training and Certification of Fishing Vessel Personnel

9.26 The Committee, having noted the request to consider the inclusion of the STCW-F Convention in the scope of the III Code to an extent similar to the 1978 STCW Convention (refer to paragraph 7.2.2 of part I of the annex to resolution A.1067(28) on *Framework and procedures for the IMO Member State Audit Scheme)* in the future, invited interested Member States to raise the matter in the context of the output on "Comprehensive review of the 1995 STCW-F Convention", currently on the agenda of the HTW Sub-Committee, taking into account the need to keep the III Code unchanged over a given seven-year cycle.

9.27 Having noted a request to initiate a review of the *FAO/ILO/IMO Document for Guidance on Training and Certification of Fishing Vessel Personnel*, which referred to the STCW-F Convention, the Committee invited interested delegations to consider proposing a new output, in accordance with the Committees' method of work (MSC-MEPC.1/Circ.5), once the review of the STCW-F Convention had been completed by the HTW Sub-Committee.

9.28 The Committee, having noted the request to incorporate the STCW-F Convention and the *FAO/ILO/IMO Document for Guidance on Training and Certification of Fishing Vessel Personnel* in technical cooperation activities, as appropriate, explaining recent developments and reviews, invited the Technical Cooperation Committee (TCC) to consider the matter.

Safety of fisheries observers under the observers programmes

9.29 The Committee, having noted that, during Joint Working Group 3 and III 4, the FAO Secretariat had highlighted several reports on fisheries observers gone missing at sea, agreed, in principle, to cooperate with FAO, ILO and RFBs to improve the safety of fisheries observers under the observers programmes undertaken by States and RFBs.

9.30 In this context, the Committee encouraged Member States and interested organizations to submit proposals for a new output addressing the safety of fisheries observers under the observers programmes, for consideration in accordance with the Committees' method of work (MSC-MEPC.1/Circ.5).

Road map for United Nations inter-agency cooperation

9.31 The Committee considered developing an effective road map, in close cooperation with other relevant agencies of the United Nations at the highest level possible, using mechanisms such as UN-Oceans[4] or others, and a chart containing all instruments related to fisheries for rapid worldwide ratification and implementation of the international agreements relating to the fisheries sector, in particular, the 2012 Cape Town Agreement, the STCW-F Convention, the Port State Measures Agreement, and the ILO Work in Fishing Convention, 2007 (No.188); and agreed to the inclusion of a dedicated item in the terms of reference for Joint Working Group 4.

9.32 In this context, the Committee agreed that Joint Working Group 4 should also consider the use of the above-mentioned road map in the development of indicators for the 2030 SDGs (Inter-Agency and Expert Group on SDG Indicators), separately or in conjunction with ILO and FAO, as appropriate.

9.33 With a view to promoting the worldwide implementation of the instruments listed in paragraph 9.31, the Committee invited TCC to consider developing activities concerning the 2012 Cape Town Agreement and the STCW-F Convention, taking into account the Port State Measures Agreement and the Work in Fishing Convention, 2007, involving not only Administrations but also other relevant stakeholders.

Frequency of joint working group meetings and participation of ILO

9.34 The Committee noted that COFI 32 had considered the outcome of Joint Working Group 3 and had recommended that joint working group meetings should be more frequent and that ILO formally join the Joint Working Group.

9.35 In concurring with the decisions of MEPC 72, the Committee agreed to a four-year interval between joint working group meetings and supported ILO joining the Joint Working Group. In this context, the Committee requested the Secretariat, in cooperation with the FAO Secretariat, to liaise with, and offer its assistance to, the ILO Secretariat in developing the justification for ILO joining formally the Joint Working Group, for submission to the ILO governing body for consideration.

[4] UN-Oceans is an inter-agency mechanism that seeks to enhance the coordination, coherence and effectiveness of competent organizations of the United Nations system and the International Seabed Authority, in conformity with the United Nations Convention on the Law of the Sea, the respective competences of each of its participating organizations and the mandates and priorities approved by their respective governing bodies (http://www.unoceans.org/).

Draft terms of reference and provisional agenda for Joint Working Group 4

9.36 While noting that Joint Working Group 4 would be tentatively scheduled to take place in 2019, the Committee, concurring with the decisions of MEPC 72, requested the Secretariat, in collaboration with the FAO and ILO Secretariats, to develop jointly the draft terms of reference and provisional agenda for Joint Working Group 4, for submission to III 5, with a view to approval at MEPC 73 and MSC 100, as appropriate, depending on the progress made in the inter-agency process (see paragraphs 9.13, 9.25, 9.31 and 9.32).

Memorandum of Understanding on Flag State Implementation for Domestic Ships in the Pacific Islands Region

9.37 The Committee, concurring with the decisions of MEPC 72, expressed its support for the initiative of the Memorandum of Understanding on Flag State Implementation for Domestic Ships in the Pacific Islands Region, for improved regional coordination in the delivery of safe domestic shipping services, with reduced impact on the environment through regional standards, training of ship safety inspectors or surveyors and exchange of information.

9.38 Having noted that the Memorandum of Understanding had been adopted at the Third Pacific Regional Energy and Transport Ministers' Meeting, held from 24 to 28 April 2017 in Tonga, and had been signed by ministers from the Cook Islands, the Marshall Islands, Niue, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu, the Committee encouraged Member States to provide relevant information to a future session, as appropriate.

Consistency of in-water survey provisions for passenger and cargo ships

9.39 The Committee endorsed the invitation by III 4 to the SDC and SSE Sub-Committees to provide technical input on issues related to the consistency of provisions on in-water survey for passenger and cargo ships, as raised in documents MSC 98/17/1 and III 4/8/3, and instructed them to provide advice to the III Sub-Committee.

Early implementation of amendments to the 1974 SOLAS Convention and related mandatory instruments

9.40 As proposed by the Secretariat and endorsed by III 4, the Committee approved the establishment of an "MSC.7" circular series, dedicated to information related to the early implementation of amendments to the 1974 SOLAS Convention and related mandatory instruments.

Investigation into the collision between Sanchi and CF Crystal

9.41 The delegation of China informed the Committee about the status of the investigation into the collision between the Panamanian oil tanker **Sanchi** (IMO 9356608) and the Hong Kong, China flagged bulk carrier **CF Crystal** (IMO 9497050) on 6 January 2018 in the East China Sea. In particular, the delegation highlighted the successful conduct of a joint investigation with four substantially interested maritime Administrations, i.e. Bangladesh, Iran (Islamic Republic of), Panama and Hong Kong, China, and the issuance of a joint investigation report, in accordance with the relevant provisions of the Casualty Investigation Code (resolution MSC.255(84)).

10 SHIP DESIGN AND CONSTRUCTION

REPORT OF SDC 5

10.1 The Committee approved, in general, the report of the fifth session of the Sub-Committee on Ship Design and Construction (SDC) (SDC 5/15 and MSC 99/10) and took action as outlined in paragraphs 10.2 to 10.23 below.

Amendments to SOLAS regulation II-1/8-1 on the availability of passenger ships' electrical power supply in cases of flooding from side raking damage

10.2 The Committee noted information regarding the discussion at SDC 5 on the scope of the output on "Amendments to SOLAS regulation II-1/8-1 on the availability of passenger ships' electrical power supply in cases of flooding from side raking damage" and, in particular, whether this matter should be solved by applying electrical engineering solutions rather than naval architectural solutions (i.e. double hull or other structural requirements that would impact not only the current safe-return-to-port concept but also the probabilistic requirements in SOLAS chapter II-1).

10.3 Following the request of SDC 5 to clarify what exact outcome was expected under this output, the Committee recalled that:

.1 MSC 93 had instructed SDC 2 to include an item on "double hull in way of main engine rooms" under the existing output 5.2.1.13 on amendments to SOLAS chapter II-1 subdivision and damage stability regulations;

.2 SDC 3, having further examined the draft amendments to SOLAS regulation II-1/8-1.2, with a view to improving the availability of passenger ships' electrical power supply in cases of flooding from side raking damage, had agreed that "double hull in way of main engine rooms" might not be the only solution;

.3 MSC 96 had endorsed the view that the double hull might not be the only solution and, therefore, other alternative solutions needed to be further considered; and

.4 MSC 98, with a view to better reflecting the scope of the work to be done under the current output 5.2.1.13, had approved the change of the existing title (i.e. "Amendments to SOLAS regulations II-1/6 and II-1/8-1") to "Amendments to SOLAS regulation II-1/8-1 on the availability of passenger ships' electrical power supply in cases of flooding from side raking damage".

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

.1 MSC 99/10/1 (CESA), providing recommendations in order to clarify the task of improving the availability of passenger ships' electrical power supply in case of side raking damage;

.2 MSC 99/10/5 (United States), commenting on the matters emanating from SDC 5 and advising that the draft amendments proposed by the Correspondence Group on Subdivision and Damage Stability established at SDC 4 (SDC 5/3) provided functional requirements that would allow either naval architectural or electrical engineering solutions to improve the availability of the electrical power supply in cases of side raking damage;

.3 MSC 99/10/6 (Netherlands), providing comments regarding clarification of the output and proposing that the purpose/goal of the new requirements would be established and a performance standard could be developed either following the deterministic approach or as a requirement that suited the probabilistic method; and

.4 MSC 99/10/7 (IACS), commenting on the discussion at SDC 5 and expressing concern that any proposed naval architectural solution would have to carefully consider the consequential impact on the current probabilistic damage stability requirements.

10.5 In discussing the above documents, the Committee, having endorsed the view that this issue should not to be considered as part of the safe return to port requirements, noted the following views:

.1 the discussions were complicated by the need to address both deterministic and probabilistic damage stability requirements, and the need to avoid any conflict between the general damage stability requirement and a potential introduction of a new damage stability requirement;

.2 the electrical power requirements, not considering those systems specified in safe return to port requirements, were expressed in two ways, i.e. firstly, in those systems needed in a flooding emergency and, secondly, the systems which were currently required to be supplied by an emergency source of power by SOLAS regulation II-1/42;

.3 MSC 98 had adopted a comprehensive package of amendments to SOLAS chapter II-1 subdivision and damage stability requirements, including a substantially increased required subdivision index *R* which would significantly improve the damage stability survivability level of new passenger ships; and

.4 a potential gap regarding the systems that were supplied by the emergency source of electrical power in the event of flooding damage should be investigated and, in particular, the systems required in such circumstances should be specified in terms of "systems that are required to remain operational".

10.6 Having considered the above views, the Committee:

.1 agreed that no further action was required under this output;

.2 endorsed the view that the systems required should be specified in terms of "systems that are required to remain operational";

.3 invited Member States and international organizations to review the systems that were required by SOLAS regulation II-1/42 to be supplied by the emergency source of power, and the methods of energy distribution for those systems, and consider whether there were any additional systems that might need to remain operational in a flooding damage casualty;

.4 confirmed that, if any further amendments were deemed to be necessary, as a result of the above review, interested Member States should propose a new output in accordance with the Committees' method of work (MSC MEPC.1/Circ.5); and

.5 agreed that the work on this output was completed.

Computerized stability support for the master in case of flooding for existing passenger ships

Date of entry into force of the amendments to SOLAS regulation II-1/8-1

10.7 The Committee recalled that under agenda item 3 (Consideration and adoption of amendments to mandatory instruments), when considering the draft amendments to SOLAS regulations II-1/1 and II-1/8-1, it had agreed that passenger ships constructed before 1 January 2014 shall comply with SOLAS regulation II-1/8-1.3.1 not later than the first renewal survey after five years after the date of entry into force of the amendments to SOLAS regulation II-1/8-1, i.e. not later than the first renewal survey after 1 January 2025 (see paragraph 3.12).

Guidelines on operational information for masters in case of flooding for passenger ships constructed before 1 January 2014

10.8 The Committee also recalled that under agenda item 3, when considering the draft amendments to SOLAS regulations II-1/1 and II-1/8-1, it had approved MSC.1/Circ.1589 on *Guidelines on operational information for masters in case of flooding for passenger ships constructed before 1 January 2014* (see paragraph 3.81.6).

Finalization of second generation intact stability criteria

10.9 Having noted the revised way forward for the finalization of second generation intact stability criteria agreed by SDC 5 (SDC 5/15, paragraphs 6.13 and 6.14), the Committee authorized SDC 6 to establish an Experts' Group on Intact Stability (IS) for consideration of the progress report of the IS Correspondence Group which had been re-established at SDC 5.

Carriage of more than 12 industrial personnel on board vessels engaged on international voyages

10.10 The Committee recalled that MSC 96 had agreed that:

.1 a new chapter to SOLAS should be developed solely for the carriage of more than 12 industrial personnel;

.2 the above new chapter should be supported by a new code, which could include elements of the 2008 SPS and 2000 HSC Codes, as appropriate; and

.3 the number of industrial personnel being transported should be the basis for applying the new SOLAS requirements.

10.11 The Committee also recalled that MSC 96 had endorsed the outline of the draft new chapter [XV] of SOLAS and the draft new code addressing the carriage of more than 12 industrial personnel on board vessels engaged on international voyages and instructed the SDC Sub-Committee to use the outline as the basis for further development, taking into consideration the impact on other IMO instruments.

10.12 The Committee further recalled that MSC 97 had adopted the *Interim recommendations on the safe carriage of more than 12 industrial personnel on board vessels engaged on international voyages* (resolution MSC.418(97)) and endorsed the view that the proposed definitions of industrial personnel and offshore industrial activities should be the basis for the development of the mandatory instrument.

10.13 The Committee noted the principles that had been considered by SDC 5 as the basis for the development of the draft new SOLAS chapter [XV] and the draft new code addressing safety standards for the carriage of more than 12 industrial personnel on board vessels engaged on international voyages (SDC 5/15, paragraph 7.9).

10.14 The Committee also noted that SDC 5 had invited Member States and international organizations objecting to the aforementioned basic principles to provide proposals for consideration at this session.

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

.1 MSC 99/10/2 (Bahamas), expressing concerns that the current basis of the work, i.e. application to international voyages, was not sustainable and advising that either the nature of voyages must be specially described in the proposed new SOLAS chapter [XV] or the scope of work be redefined, with a view to developing a recommendatory code; and

.2 MSC 99/10/4 (Marshall Islands et al.), proposing to consider several important issues that emerged at SDC 5 requiring policy decisions from the Committee, with a view to clarifying the desired outcome of the work under this output.

10.16 In discussing the application of the new code, the Committee, having noted differing views on the matter, could not agree whether the nature of voyages should be specifically described in the proposed new SOLAS chapter [XV] or the scope of work should be redefined, with a view to developing a recommendatory code. Consequently, the Committee agreed to keep this issue open for future consideration.

10.17 Following discussion of the proposals in document MSC 99/10/4, the Committee agreed that:

.1 the aggregated total maximum number of passengers, industrial personnel and special personnel which may be carried on board in order not to require compliance with the new code should be 12; and

.2 the application of the new SOLAS chapter [XV] and the new code should be limited to ships holding Cargo Ship Safety Certificates.

10.18 Consequently, the Committee instructed SDC 6 to continue the work under this output as planned, taking into account the decisions outlined in paragraph 10.17 above.

Amendments to the 2011 ESP Code

10.19 The Committee considered draft amendments to the International Code on the Enhanced Programme of Inspections during Surveys of Bulk Carriers and Oil Tankers, 2011 (2011 ESP Code), prepared by SDC 5 in accordance with the procedure for undertaking regular updates of the Code agreed at DE 57 (DE 57/25, paragraph 24.5) and concurred with by MSC 92.

10.20 The Committee approved the draft MSC resolution on Amendments to the 2011 ESP Code, as set out in annex 16, and requested the Secretary-General to circulate them in accordance with SOLAS article VIII, with a view to adoption at MSC 100.

Guidelines for wing-in-ground craft

10.21 Having considered the consolidated text of the draft guidelines for wing-in-ground craft, prepared by SDC 5 based on the outcome of the revision of the *Interim guidelines for wing-in-ground craft* (MSC/Circ.1054 and Corr.1) by interested Member States and international organizations, the Committee, having agreed to an editorial modification proposed by the delegation of the Russian Federation to paragraph 2 of the preamble, i.e. replacing the words "ground effect ships" with the words "surface-effect ships", approved MSC.1/Circ.1592 on *Guidelines for wing-in-ground craft*.

Draft amendments to part A of the 2008 IS Code

10.22 The Committee considered draft amendments to part A of the 2008 IS Code, prepared by SDC 5 based on a revision of the existing footnotes and references to sections and chapters of part B of the Code in part A of the Code.

10.23 Following consideration, the Committee confirmed that the modifications to part A of the 2008 IS Code proposed by SDC 5 could be treated as corrections rather than amendments, and, therefore, be dealt with as per the applicable correction process. Having noted that the proposed draft amendments were relevant not only to the 2008 IS Code, as adopted by resolution MSC.267(85), but also to the amendments adopted by resolutions MSC.413(97) and MSC.414(97), which shall enter into force on 1 January 2020, the Committee requested the Secretariat to issue necessary corrigenda and notes verbales of rectification, correcting the text of the 2008 IS Code, as adopted by resolution MSC.267(85), and the amendments adopted by resolutions MSC.413(97) and MSC.414(97).

11 POLLUTION PREVENTION AND RESPONSE

Matters emanating from the fifth session of the Sub-Committee

11.1 The Committee noted the information contained in document MSC 99/11 (Secretariat) on the outcome of the fifth session of the Sub-Committee on Pollution Prevention and Response (PPR 5), in particular that PPR 5 had prepared draft amendments to the IBC and BCH Codes, with a view to submission to MEPC 73 and MSC 100 for approval and subsequent adoption.

11.2 The Committee also noted views that several issues discussed during PPR 5 could have safety implications, e.g. the identified candidate control measures for black carbon (PPR 5/24, paragraph 7.13.2), sampling points for fuel oil used on board ships (PPR 5/24, paragraph 12.3), and safety issues with blended fuels (PPR 5/24, paragraph 13.6.16) and blending of bulk liquid cargoes (PPR 5/24, paragraph 13.12); and reiterated its invitation to MEPC to keep it informed of such issues (see paragraph 2.3).

12 NAVIGATION, COMMUNICATIONS AND SEARCH AND RESCUE

REPORT OF NCSR 5

12.1 The Committee approved, in general, the report of the fifth session of the Sub-Committee on Navigation, Communications and Search and Rescue (NCSR 5/23, NCSR 5/23/Add.1, NCSR 5/23/Corr.1 and MSC 99/12) and took action as indicated in paragraphs 12.2 to 12.31.

Traffic separation schemes (TSS) and associated measures

12.2 The Committee adopted, in accordance with the *Procedure for the adoption and amendment of traffic separation schemes, routeing measures other than traffic separation schemes, including designation and substitution of archipelagic sea lanes, and ship reporting systems* (resolution A.858(20)) (the Procedure), new traffic separation schemes and associated measures, for dissemination by means of COLREG.2/Circ.71, as follows:

.1 "In Dangan Channel"; and

.2 "In the vicinity of Kattegat".

Routeing measures other than TSS

12.3 In accordance with the Procedure set out in resolution A.858(20), the Committee adopted new, and an amendment to existing, routeing measures other than traffic separation schemes, for dissemination by means of SN.1/Circ.336, as follows:

.1 amended areas to be avoided "Off the coast of Ghana in the Atlantic Ocean";

.2 the precautionary area "Dangan Channel No.2" with the recommended directions of traffic flow;

.3 the deep-water routes, recommended routes and precautionary area "In the vicinity of Kattegat"; and

.4 the two-way routes, precautionary areas and areas to be avoided "In the Bering Sea and Bering Strait".

Implementation of the adopted routeing measures

12.4 The Committee agreed that the new and amended routeing measures, as adopted, should be implemented as follows:

.1 routeing measures set out in paragraphs 12.2.1, 12.3.1, 12.3.2 and 12.3.4 on 1 December 2018; and

.2 routeing measures set out in paragraphs 12.2.2 and 12.3.3 on 1 July 2020.

LRIT

12.5 The Committee approved an amendment to the *Continuity of service plan for the LRIT system* (MSC.1/Circ.1376/Rev.2), for dissemination of the revised circular by means of MSC.1/Circ.1376/Rev.3.

12.6 The Committee approved amendments to the *LRIT Technical documentation, parts I and II* (MSC.1/Circ.1259/Rev.7 and MSC.1/Circ.1294/Rev.5, respectively), as set out in document NCSR 5/23, annex 4, and requested the Secretariat to issue the corresponding revisions of the circulars, i.e. MSC.1/Circ.1259/Rev.8 and MSC.1/Circ.1294/Rev.6, after the third modification testing phase had been conducted.

Performance standards for shipborne Indian Regional Navigation Satellite System (IRNSS) receiver equipment

12.7 The Committee adopted resolution MSC.449(99) on *Performance standards for shipborne Indian Regional Navigation Satellite System (IRNSS) receiver equipment,* as set out in annex 17.

Guidelines for the harmonized display of navigation information received via communications equipment

12.8 The Committee approved MSC.1/Circ.1593 on *Interim guidelines for the harmonized display of navigation information received via communications equipment.*

IMO/IHO Harmonization Group on Data Modelling

12.9 The Committee authorized the holding of the second meeting of the IMO/IHO Harmonization Group on Data Modelling (HGDM 2), to take place from 29 October to 2 November 2018 at IMO Headquarters, and requested the Secretariat to take action, as appropriate.

12.10 The Committee endorsed the action taken by NCSR 5, as an exceptional case, in authorizing the Secretariat to submit the report of HGDM 2 to NCSR 6 three weeks beyond the deadline for submission of bulky documents, i.e. by 6 November 2018.

ITU matters

12.11 The Committee authorized the Joint IMO/ITU Experts Group, at its fourteenth meeting from 3 to 7 September 2018, to submit an updated draft IMO position to MSC 100, for the Committee's approval of the position to be submitted to the Conference Preparatory Meeting of the International Telecommunication Union (ITU) to be held in February 2019.

12.12 The Committee endorsed the action taken by NCSR 5 in requesting the Secretariat to convey the liaison statement on autonomous maritime radio devices to ITU-R Working Party 5B.

12.13 The Committee endorsed the action taken by NCSR 5 in instructing the Joint IMO/ITU Experts Group to prepare the necessary liaison statements on the possible interferences with L-band maritime satellite communications, and forward them directly to ITU-R Working Party 5B and the European Conference of Postal and Telecommunications Administrations (CEPT).

12.14 The Committee noted that the issue of possible interference of terrestrial mobile communications with L-band maritime satellite communications was of great concern to the maritime industry. It further noted views that discussions in ITU and regional spectrum management bodies, such as CEPT, were dominated by the mobile industry, including the mobile phone industry. Having noted the lack of maritime administration presence at these meetings, the Committee encouraged maritime administrations to liaise closely with their national authorities attending meetings of ITU and regional bodies concerned with spectrum management, with the aim of addressing this safety critical issue.

12.15 Having agreed with a proposal by the delegation of the United Kingdom, the Committee requested the Secretariat to send a letter to ITU outlining the concerns; stressing the effect on Global Maritime Distress and Safety System (GMDSS) services; and bringing to their attention the concerns of the Organization regarding ensuring safety of life at sea.

Recognition of Maritime Satellite Services provided by Inmarsat Global Ltd

12.16 The Committee adopted resolution MSC.450(99) on *Statement of Recognition of Maritime Satellite Services provided by Inmarsat Global Ltd,* as set out in annex 18.

12.17 The Committee noted a view that the Inmarsat Fleet Safety service was at present a regional service; that it was anticipated that more regional satellite service providers would be recognized to provide GMDSS services in the future; and that the implementation of regional satellite service providers in GMDSS should be considered to ensure regulatory consistency.

Recognition of the Iridium mobile satellite system for use in GMDSS

12.18 The Committee noted that NCSR 5, after a lengthy debate and having noted concerns expressed, had invited the Committee to note the discussion (NCSR 5/23, paragraphs 14.26 to 14.56) and provide guidance on the way forward. In this context, NCSR 5 had invited Member States and international organizations to submit proposals on this matter to this session.

12.19 The Committee had for its consideration the following documents:

.1 MSC 99/12/2 (China), providing a list of items which, in the view of the submitter, still did not comply with the *Criteria for the provision of mobile satellite communication systems in the Global Maritime Distress and Safety System (GMDSS)* (resolution A.1001(25)), and a list of unresolved outstanding issues on which many Member States had expressed common concerns at NCSR 5;

.2 MSC 99/12/5 (United Kingdom), expressing a number of concerns which needed to be resolved and stating that they could not agree to a recommendation for recognition while such concerns existed;

.3 MSC 99/12/6 (Germany), providing a number of issues related to resolution A.1001(25) which still needed to be resolved and expressing the need to task NCSR 6 to continue the evaluation in line with paragraph 2.3.1 of the resolution;

.4 MSC 99/12/7 (United States), providing a response to the concerns raised in documents MSC 99/12/2 and MSC 99/12/5;

.5 MSC 99/12/8 (United States), providing a draft resolution for recognition of the Iridium mobile satellite system for use in GMDSS; and

.6 MSC 99/12/9 (Finland et al.), inviting the Committee to recognize Iridium on the basis of the report of the International Mobile Satellite Organization (IMSO), and informing that Iridium, pending IMSO's issuance of the Letter of Compliance, would look to start to provide GMDSS services in January 2020.

12.20 During the ensuing discussion the following views, inter alia, were expressed:

.1 appreciation for the detailed explanation by the delegation of the United States, as set out in annex 26, with respect to the concerns raised at NCSR 5 and by China (MSC 99/12/2), Germany (MSC 99/12/6) and the United Kingdom (MSC 99/12/5);

.2 general support for the recognition of Iridium as a GMDSS satellite service provider, having satisfactorily complied with the criteria set out in *Criteria for the provision of mobile satellite communication systems in the Global Maritime Distress and Safety System (GMDSS)* (resolution A.1001(25));

.3 concerns with respect to operational implementation issues should be addressed after the recognition;

.4 IMSO would be the organization responsible for monitoring the outstanding implementation issues as stated in the report of NCSR 5 (NCSR 5/23, section 14) and in the relevant submissions to this session of the Committee;

.5 the implementation should be monitored by the Organization;

.6 the IMO International SafetyNET Coordinating Panel should guide the implementation of the provision of maritime safety information to ensure a controlled, ordered and pragmatic introduction of the system; and

.7 concerns about the draft MSC resolution (MSC 99/12/8), which appeared to allow short-burst data capable terminals outside those previously assessed by IMSO to be part of GMDSS, including satellite phones, which would potentially endanger the harmonized, managed and monitored provision of maritime safety information.

12.21 After the discussion, the Committee took the following decisions:

.1 agreed that Iridium Satellite LLC, through its Safety Voice service, Short-Burst Data service and enhanced group calling service, had satisfied the criteria established to receive recognition as a mobile satellite communication service provider in GMDSS;

.2 recognized the maritime mobile satellite services provided by the Iridium Safety Voice, Short-Burst Data and enhanced group calling services, for use in GMDSS;

.3 adopted resolution MSC.451(99) on *Statement of Recognition of the Maritime Mobile Satellite Services provided by Iridium Satellite LLC*, as set out in annex 19;

.4 noted the commitment of the delegation of the United States and Iridium to address any outstanding implementation issues;

.5 acknowledged the role of the IMO International SafetyNET Coordinating Panel that worked on behalf of the Committee with respect to the implementation of the provision of maritime safety information in accordance with the guidance material approved by the Committee; and

.6 invited IMSO to monitor the implementation and report to the Committee when the Public Services Agreement with Iridium had been concluded and the Letter of Compliance had been issued.

Method to match the two IDs assigned to an EPIRB-AIS

12.22 The Committee endorsed the action taken by NCSR 5 in authorizing the Joint IMO/ITU Experts Group to prepare a liaison statement on the proposed revision of Recommendation ITU-R M.1371-5 with respect to the method to match the two IDs assigned to an EPIRB-AIS, and forward it directly to ITU-R Working Party 5B (NCSR 5/23, paragraph 15.7).

Amendments to the IAMSAR Manual

12.23 The Committee approved MSC.1/Circ.1594 on *Amendments to the IAMSAR Manual*, taking into account ICAO's concurrence with the inclusion of the amendments in the 2019 edition of the Manual.

Workload of the NCSR Sub-Committee

12.24 The Committee, noting NCSR 5's considerations with regard to its workload, based on experience gained since the amalgamation of the NAV and COMSAR Sub-Committees in 2014, had for its consideration the following documents:

.1 MSC 99/12/3 (Secretariat) providing, as requested by NCSR 5, an analysis of the workload of the NCSR Sub-Committee, including possible options to address the challenges identified; and

.2 MSC 99/12/4 (United Kingdom) providing potential future methods for alleviating the workload of the Sub-Committee and proposing to extend the duration of NCSR Sub-Committee sessions.

12.25 During the ensuing discussion the following views were expressed:

.1 considering the broad-ranging and cross-cutting issues affecting navigation, communications and search and rescue, dividing the NCSR Sub-Committee into two sub-committees should be avoided;

.2 more work, such as MASS and a revision of SOLAS chapter V, were expected to be added to the biennial agenda of the Sub-Committee and to avoid the establishment of more intersessional working groups it was preferred to go back to the previous status quo of two sub-committees;

.3 intersessional meetings of working groups would have the disadvantage of the lack of interpretation and would increase travel costs for delegations;

.4 an extension of the duration of the Sub-Committee's sessions might not be the solution and intersessional meetings might be more efficient;

.5 extending the duration of sessions of the Sub-Committee to seven or eight days would allow working groups to progress the work within the framework of a session of the Sub-Committee;

.6 another option would be to hold three sessions of the Sub-Committee during a biennium;

.7 extending the duration of sessions would be a realistic compromise and provide the least financial and administrative impact;

.8 cost implications could be kept to a minimum if the arrangements for interpretation were kept at the current level;

.9 any new arrangement should be implemented for a trial period and re-evaluated by the Committee thereafter; and

.10 limiting the number of agenda items on the provisional agenda of the Sub-Committee was not supported as the work volume of individual agenda items could vary significantly.

12.26 After discussion, the Committee:

.1 agreed to the extension of the NCSR Sub-Committee's meeting time for each session to eight days, for a trial period of two sessions starting with NCSR 6 in 2019, and requested Council to endorse this decision;

.2 agreed not to add to the workload of the Sub-Committee for the time being and include new outputs in the post-biennial agenda of the Committee;

.3 noted that by extending sessions of the NCSR Sub-Committee to eight days, the weekend in-between may offer the opportunity for working groups to reduce their workload; and

.4 agreed to keep the arrangement for interpretation unchanged at the current level of four days per session.

Harmonization of bridge design and display of information

12.27 The Committee adopted resolution MSC.452(99) on *Amendments to the Revised Performance standards for integrated navigation systems (INS) (resolution MSC.252(83))*, as set out in annex 20, relating to the harmonization of bridge design and display of information approved by NCSR 4.

E-navigation Strategy Implementation Plan (SIP)

12.28 The Committee approved MSC.1/Circ.1595 on *E-navigation Strategy Implementation Plan – Update 1*.

ECDIS software updates

12.29 The Committee considered the request of NCSR 5 to revoke III.2/Circ.2 (*Action to be taken by port States on the required updates of electronic chart display and information systems (ECDIS*)) as of 1 July 2018, together with document MSC 99/12/10 (China), commenting on implementation difficulties as to ECDIS software updates from the perspective of statutory surveys (see also paragraph 9.5).

12.30 During the ensuing discussion, the following views were expressed:

.1 the decision of NCSR 5, having completed the technical consideration at the sub-committee level, should be respected;

.2 views differed regarding the validity of the updates to ECDIS, arising from different interpretations of provisions;

.3 Type Approval schemes allowed for the updating of approved systems on board, whereby the associated software updates could be accommodated under the existing type approval; as a result, these updates did not revoke the validity of the existing type approval certificate previously issued for the equipment;

.4 software upgrades to existing equipment should be conducted with full consideration of the applicable performance standards, and a single and uniform method of documenting upgrades to equipment software to demonstrate compliance in a transparent and globally harmonized way would be beneficial; and

.5 IHO had identified a security issue which was being addressed by the responsible IHO working group by monitoring the development on guidance on cyber security; in this context, the working group had identified a possible vulnerability of the set of seven files nominally associated to an ENC delivery and advised to protect the file set with a digital signature.

12.31 Following discussion, the Committee, having invited the delegation of China and other interested parties to consider submitting a proposal for a new output to address these issues, subsequently agreed that III.2/Circ.2 should be revoked as from 1 July 2018, and requested the Secretariat to take action, as appropriate, in IMODOCS, to that effect.

OTHER RELATED MATTERS

Application of the BeiDou Message Service System for recognition and use in GMDSS

12.32 The Committee considered document MSC 99/12/1 (China), forwarding an application for the recognition of the BeiDou Message Service System (BDMSS) and use in GMDSS, and informing that they would, in compliance with resolution A.1001(25), make available to the Organization all necessary information for the evaluation of the satellite system in relation to the criteria specified in the resolution.

12.33 Consequently, the Committee referred the application to the NCSR Sub-Committee for evaluation of the detailed information, to be provided to the Sub-Committee in due course, and authorized the Sub-Committee to invite IMSO to conduct the Technical and Operational Assessment, as appropriate.

Practical issues concerning the implementation of COLREG 1972

12.34 The Committee noted information provided by China (MSC 99/INF.7) on several practical issues concerning the implementation of the International Regulations for Preventing Collisions at Sea, 1972 (COLREG 1972).

12.35 The Committee noted information provided by the observer from the International Association of Classification Societies (IACS) on *Unified interpretation on the application of COLREG with respect to the placement of sidelights* (MSC.1/Circ.1577). In paragraph 3 of this circular, Member States were invited to use the annexed unified interpretation as guidance on the placement of sidelights according to annex I/9(a)(i) and annex I/10(a)(i) of COLREG 1972, as amended, on ships contracted for construction on or after 1 July 2019.

12.36 The Committee further noted that IACS member societies would apply the unified interpretation when they encountered such difficulties in approving navigation light arrangements, on ships contracted for construction earlier than 1 July 2019, unless they were instructed otherwise in writing by the Administration on whose behalf they were authorized to act as a recognized organization; and that explanations could be found in IACS UI COLREG 5, available on the IACS website.

13 SHIP SYSTEMS AND EQUIPMENT

Urgent matters emanating from SSE 5

13.1 The Committee considered urgent matters emanating from the fifth session of the Sub-Committee on Ship Systems and Equipment (SSE) (SSE 5/17) and took action as indicated below.

Development of goals and functional requirements for onboard lifting appliances and anchor handling winches (OLAW)

13.2 The Committee noted the progress made on the development of goals and functional requirements for onboard lifting appliances and anchor handling winches (OLAW) and, in particular, the views expressed at SSE 5 on how to address training and certification of crews and shore-based personnel using OLAW.

Development of a draft unified interpretation of SOLAS regulation 11-2/9.2.4.2

13.3 The Committee, having recalled that MSC 98 had instructed SSE 5 to further consider the draft unified interpretation of SOLAS regulation II-2/9.2.4.2 related to the fire integrity of bulkheads and decks of tankers (MSC 98/23, paragraph 12.37), noted the decision of SSE 5 to consider matters related to the development of a pertinent draft unified interpretation at a future session, when additional information had been made available.

14 IMPLEMENTATION OF THE STCW CONVENTION

Secretary-General's report pursuant to STCW regulation I/7, paragraph 2

14.1 The Committee noted that no reports on initial communication of information, pursuant to STCW regulation I/7, paragraph 2, had been submitted to this session.

Secretary-General's report pursuant to STCW regulation I/8

14.2 The Committee was advised that, in preparing the report on the results of evaluations conducted by STCW Parties pursuant to STCW regulation I/8, the Secretary-General had solicited and taken into account the views expressed by competent persons selected from the list established pursuant to paragraph 7 of section A-I/7 of the STCW Code and circulated under the *List of competent persons maintained by the Secretary-General pursuant to section A-I/7 of the STCW Code* (MSC/Circ.797/Rev.30).

14.3 In this context, the Committee considered the reports for each of the six STCW Parties concerned (Bulgaria, Liberia, Mauritius, Myanmar, Oman and the United States), as set out in document MSC 99/WP.3, containing, in line with the *Guidance on the preparation, reporting and review of independent evaluations and steps taken to implement mandatory amendments required by regulation I/7 of the STCW Convention* (MSC.1/Circ.1449):

.1 the report to the Committee;

.2 a description of the procedures followed; and

.3 a summary of the conclusions reached in the form of a comparison table.

14.4 Following consideration of the reports, the Committee confirmed that the aforementioned Parties continued to give full and complete effect to the provisions of the STCW Convention and requested the Secretariat to issue updated information concerning the reports of independent evaluation by means of MSC.1/Circ.1164/Rev.19.

14.5 The Committee also encouraged Parties to the STCW Convention to submit their independent evaluation reports, in accordance with regulation I/8 thereof.

Approval of competent persons

14.6 The Committee, having recalled that section A-I/7 of the STCW Code required the Secretary-General to maintain a list of competent persons approved by it, considered document MSC 99/14 (Secretariat), containing relevant information provided by STCW Parties regarding experts made available or recommended for inclusion in the list of competent persons, as well as competent persons withdrawn from the list.

14.7 Following consideration, the Committee:

.1 approved the inclusion of five competent persons in the *List of competent persons maintained by the Secretary-General pursuant to section A-I/7 of the STCW Code* (MSC.1/Circ.797/Rev.30) and requested the Secretariat to issue the revised list by means of MSC.1/Circ.797/Rev.31;

.2 noted the competent persons who had been withdrawn from the List by two STCW Parties; and

.3 invited STCW Parties to inform the Secretariat of any amendments that the List might require (withdrawals, additions, change of address, etc.), with a view to ensuring that those listed in the latest revision of the List were available to serve as competent persons and were readily contactable.

14.8 The Committee, having thanked those STCW Parties that had nominated competent persons, encouraged all STCW Parties to nominate more competent persons to ensure the effective implementation of the provisions of the STCW Convention.

15 CAPACITY-BUILDING FOR THE IMPLEMENTATION OF NEW MEASURES

Background

15.1 The Committee recalled that MSC 98 (MSC 98/23, paragraphs 13.2 and 13.3) had requested the Vice-Chair of the Committee, in consultation with the Chair and with the assistance of the Secretariat, to submit to MSC 99 a preliminary assessment of the capacity-building implications and technical assistance needs related to approved draft amendments to mandatory instruments and the new outputs related to mandatory instruments which had been approved at that session.

Assessment of capacity-building implications for the implementation of new measures

15.2 The Committee considered document MSC 99/15 (Vice-Chair), providing the outcome of the aforementioned preliminary assessment, and agreed that there were no capacity-building implications or a need for technical assistance with regard to the draft amendments and the outputs related to proposals to amend mandatory instruments which had been approved at MSC 98.

15.3 Consequently, the Committee concluded that there was no need to establish the Ad Hoc Capacity-Building Needs Analysis Group at this session. In this regard, the Committee noted the recommendation in paragraph 5 of document MSC 99/15 that it was too early to evaluate with confidence the capacity-building implications for the new outputs considered and assessed in annex 3 of the document, and that the assessment of the above-referred new outputs could be updated once the scope of the work was better defined and the necessary amendments to mandatory instruments had been developed by the relevant sub-committees.

Preliminary assessment for the next session

15.4 The Committee requested the Vice-Chair, in consultation with the Chair and with the assistance of the Secretariat, to submit to MSC 100 a preliminary assessment of the capacity-building implications and technical assistance needs related to draft amendments to mandatory instruments and new outputs related to mandatory instruments approved at this session.

15.5 Finally, the Committee requested the Secretariat to inform TCC on the outcome of its considerations of this agenda item.

16 FORMAL SAFETY ASSESSMENT

Analysis on the input and output speed of the GISIS MCI module

16.1 The Committee recalled that it had considered matters related to the ongoing work being undertaken by the Secretariat to improve the function of the revised GISIS Marine Casualties and Incidents (MCI) module under agenda item 9 (Implementation of IMO instruments) (see paragraph 9.2).

Revised guidelines for formal safety assessment

16.2 The Committee noted that MEPC 72 (MEPC 72/17, paragraph 2.3) had concurrently approved the *Revised guidelines for Formal Safety Assessment (FSA) for use in the IMO rule-making process* (MSC-MEPC.2/Circ.12/Rev.2).

17 PIRACY AND ARMED ROBBERY AGAINST SHIPS

Developments since MSC 98, including information-sharing on incidents of piracy and armed robbery

17.1 The Committee considered document MSC 99/17 (Secretariat), reporting on developments on piracy and armed robbery against ships since MSC 98, including piracy and armed robbery statistics and regional developments, and highlighting that reports on 203 incidents of piracy and armed robbery against ships worldwide had been received by the Organization in 2017, the lowest for over 20 years. This confirmed the current downward year-on-year trend, with a reduction of about 8% at global level.

17.2 In considering document MSC 99/17, the Committee:

.1 reminded Member States, as well as shipmasters, shipowners/operators and commercial companies, to continue to report piracy and armed robbery incidents to the Organization, using the reporting form set out in appendix 5 of MSC.1/Circ.1333/Rev.1;

.2 reiterated the need for responses to the Questionnaire on information on port and coastal State requirements related to privately contracted armed security personnel on board ships set out in MSC-FAL.1/Circ.2;

.3 noted with respect to piracy and armed robbery against ships in the waters off the coast of Somalia that in 2017 a total of six incidents had been reported (two hijacked, one boarded, and three attempted boardings). So far, in 2018 there had been two reported incidents of attempted piracy (**Leopard Sun** on 22 February 2018 and **Kriti Spirit** on 31 March 2018), the details of which were promulgated in GISIS; the Committee further noted that Somalia-based piracy had been suppressed, but not eradicated;

.4 noted that in the Gulf of Guinea, as at 30 April 2018, 37 incidents of piracy and armed robbery against ships had been reported, some resulting in the hijacking of ships and holding of crew members for ransom; in late March 2018, several attacks on large fishing vessels had taken place in waters off Equatorial Guinea, Ghana and Nigeria, involving the use of captured vessels as temporary mother ships to conduct attacks on other fishing vessels and merchant ships, as well as the abduction of crew members; on a more positive note, the Committee noted that naval forces in the region were showing an increased appetite and capability to intervene in such incidents; and

.5 noted that in response to the threats and recent incidents arising from the conflict in Yemen, such as sea mines and waterborne improvised explosive devices, the Combined Maritime Forces, the International Chamber of Shipping (ICS), BIMCO and INTERTANKO had published interim guidance on maritime security in the southern Red Sea and Bab el-Mandeb, which was promulgated on the IMO website.

17.3 In considering the issue of floating armouries (MSC 99/17, paragraphs 20 to 22), the Committee noted that ISO 28007 for private maritime security companies could be applied for accredited certification of floating armouries but would require an informative annex to clarify the unique requirements for such vessels. The Committee also noted that the issue of floating armouries was currently being examined by the United Nations Office on Drugs and Crime (UNODC) in consultation with the Secretariat, at the request of Member States. A draft summary of applicable law would be discussed at the UNODC Global Maritime Crime Programme's legal conference in Colombo, Sri Lanka, to be held from 18 to 20 June 2018. The Committee further noted that a number of delegations expressed strong reservations on the competence of the Organization to develop guidance on floating armouries, making reference to detailed discussions on the issue at previous sessions of the Committee. The Committee concluded that it would be premature for it to undertake further work pending the outcome of the aforementioned UNODC meeting, but requested the Secretariat to continue consultations with UNODC and various stakeholders regarding the legal and regulatory regime around floating armouries.

17.4 The Committee agreed to discontinue the monthly circulars containing reports on incidents of piracy and armed robbery against ships, while maintaining the annual reports as part of the series of MSC.4 circulars, given the availability of information and statistics on piracy and armed robbery against ships in GISIS and the system's functionality.

17.5 The Committee stressed that the diligent application of IMO guidance and best management practices to counter piracy and armed robbery against ships worked and should be continued; that Member States needed to continue to provide naval assets; and that flag States needed to continue to monitor the threat to ships flying their flag and set appropriate security levels in accordance with the ISPS Code.

17.6 The Committee noted information provided by the delegations of Cameroon, Ghana and Nigeria on actions taken to address piracy and armed robbery against ships in the Gulf of Guinea. The full statements of the delegations of Cameroon, Ghana and Nigeria are set out in annex 26.

17.7 The Committee noted a number of interventions calling for a reduction of the high-risk area as detailed in the industry-developed Best Management Practices (BMP4). A statement by the delegation of Oman in this regard is set out in annex 26. The Committee encouraged interested States to engage with the organizations that develop that guidance.

Progress report of the Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP)

17.8 The Committee noted with appreciation the information contained in document MSC 99/INF.15 (ReCAAP-ISC) providing an update of the activities carried out by the Information-sharing Centre of ReCAAP (ReCAAP-ISC) and the situation of piracy and armed robbery against ships in Asia and thanked them for their continuous support to the Organization's piracy reporting.

17.9 The Committee also noted information provided by the observer from ReCAAP-ISC, in particular that there had been a 32% decrease in the number of piracy/armed robbery incidents during January to April 2018 compared to the same period in 2017; that there had been no cases of "theft of oil cargo" in 2018; and that there had been no incidents of "kidnap for ransom" in the Sulu/Celebes Sea since March 2017. The Committee further noted that the Philippines Coast Guard had notified ReCAAP-ISC of planned attacks in the Sabah region and that Malaysian security forces had taken action; and the maritime community was advised to remain alert and take the necessary precautions to mitigate their risks when operating in the area.

Standardized reporting of global piracy and armed robbery incidents

17.10 The Committee noted the information contained in document MSC 99/INF.18 (Marshall Islands et al.), highlighting differences in incident type definitions, reporting methods and statistical analyses of maritime security incidents within and across regions; informing the Committee that they intended to establish an informal working group to develop harmonized global maritime security incident type definitions; and inviting interested parties to participate.[5]

[5] **Point of contact:**
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17.11 The Committee noted the views of some delegations, highlighting the need for incidents to be reported to the coastal States concerned; agreeing that the global standardized formats for reporting set out in MSC.1/Circs.1333 and 1334 were still relevant; and maintaining the need for regional approaches to piracy reporting as well as global ones. In this respect, the Committee encouraged members and observers to engage with the aforementioned informal working group and to take into account the views expressed.

18 UNSAFE MIXED MIGRATION BY SEA

Background

18.1 The Committee recalled that at MSC 98, while considering the proposals of ICS in response to the migrant crisis in the central Mediterranean region (MSC 98/16), Member States and international organizations had affirmed their concern for the humanitarian situation and the loss of life and agreed that the way forward was to promote appropriate and effective action at the United Nations.

18.2 The Committee also recalled that MSC 98 had noted that the United Nations-led Global Compact for Safe, Orderly and Regular Migration (global compact for migration) was a three-phase approach that could culminate in a United Nations-wide approach to address the issue and that the consultation phase had taken place from April to November 2017; and had encouraged Member States and international organizations to participate in that process.

18.3 The Committee further recalled that the Secretary-General had informed MSC 98 that he had been in contact with the International Organization for Migration (IOM) to organize a meeting among the relevant United Nations agencies, to share views and to find possible measures to solve this complex problem, bearing in mind the remit of the Organization.

18.4 The Committee recalled that MSC 98 had encouraged Member States to report incidents and to provide the information included in the appendix of the *Interim measures for combating unsafe practices associated with the trafficking, smuggling or transport of migrants by sea* (MSC.1/Circ.896/Rev.2) via the Facilitation module in GISIS.

Inter-agency Meeting on Mixed Migration

18.5 The Committee considered document MSC 99/18 (Secretariat), containing information on the Inter-agency Meeting on Mixed Migration held at IMO Headquarters on 30 October 2017, following the invitation of the Secretary-General to the Heads of concerned international organizations and main stakeholders of the maritime industry. Representatives from IOM, UNCHR, OHCHR, UNODC, EUNAVFOR MED operation SOPHIA, ICS, BIMCO, IFSMA and ITF participated in the meeting.

18.6 The Committee noted that the record of views included in the annex to document MSC 99/18 had been submitted to the Special Representative of the Secretary-General for International Migration and to the Permanent Representatives of Mexico and Switzerland to the United Nations (the two co-facilitators to lead the intergovernmental consultations and negotiations on issues related to the global compact for migration), for their consideration at the stocktaking meeting held in Puerto Vallarta, Jalisco, Mexico, from 4 to 6 December 2017.

18.7 The Committee also noted that the Special Representative of the Secretary-General for International Migration had written a letter to the Secretary-General on 25 January 2018 thanking him for the information, expressing her hopes that this topic would "feature prominently during the upcoming intergovernmental negotiations", and drawing attention to the United Nations Secretary-General's report "Making migration work for all".

18.8 The Committee further noted that the intergovernmental negotiations on the global compact for migration to be held at United Nations Headquarters in New York would conclude by July 2018, in accordance with resolution 71/280, and the Intergovernmental Conference to Adopt the Global Compact for Safe, Orderly and Regular Migration would be held in Morocco, from 10 to 11 December 2018.

18.9 In the ensuing discussion, the Committee noted the following views:

.1 most search and rescue (SAR) events were happening close to, or sometimes within, Libyan territorial waters;

.2 the current migration situation in the Mediterranean and the resulting pressures had highlighted an urgent need to rebuild the maritime institutions in Libya, including the establishment of a fully-fledged maritime rescue coordination centre in Libya (communication network included), the delivery of training to Libyan Coastguard personnel, the development of adequate standard operating procedures, the definition of SAR units' organization and the support to the Libyan authorities for the autonomous management of their maritime rescue coordination centre; facilitating SAR agreements with Libya's neighbouring countries would also be addressed in the process;

.3 EUNAVFOR MED operation SOPHIA had been contributing – as part of the EU "Comprehensive Approach" – to disrupting the smugglers' business model (that is the "core task" of the operation), fighting illicit activities at sea, to support the stabilization of Libya; had neutralized more than 500 boats; had referred 139 suspected smugglers to the Italian judicial authorities; had conducted 307 rescue operations; and had rescued more than 44,200 migrants;

.4 the Libyan Coastguard had saved more than 20,000 lives at sea in 2017 and the results achieved in the first five months of 2018 confirmed their strong commitment and eagerness to be part of the solution;

.5 the Shared Awareness and Deconfliction in the Mediterranean (SHADE MED) initiative was a biannual conference held in Rome aimed at sharing information and experience in an international context, and the sixth conference would be held on 19 and 20 June 2018;

.6 EUNAVFOR MED operation SOPHIA would continue to play the maritime security provider role in the Mediterranean Sea in accordance with European Union Member States' decisions;

.7 while the number of migrants arriving by sea in Italy had decreased, the rate at which desperate people were losing their lives could be moving in the opposite direction;

.8 refugees and migrants continued to take to the sea not only in the Central Mediterranean towards Italy but also along sea routes leading to Greece, Spain, the Bab el-Mandeb Strait, the Andaman Sea and elsewhere;

.9 the root causes of refugee displacement and the structural causes for the unsafe migration meant that, despite the risks, refugees and migrants would continue to turn to smugglers and dangerous journeys by sea and land if they did not see better options on the horizon;

.10 effective cooperation on search and rescue had to remain the first plank of collective responses to the situation in the Mediterranean and elsewhere; and while it was not a solution, the continuing loss of life at sea made it a necessity;

.11 the draft of the global compact on responsibility-sharing for refugees (global compact on refugees) did not deal directly with search and rescue, but focused rather on comprehensive responses to the refugee situations which lie at the source of many hazardous boat journeys;

.12 the inter-agency meeting of 30 October 2017 had provided an important opportunity to feed into the relevant discussions concerning the saving of lives and coordinating international efforts on missing migrants during the negotiations of the global compact for migration;

.13 the draft of the global compact for migration had a specific objective (Objective 8) dedicated to saving lives and establishing international efforts on missing migrants, where States were proposing to commit to cooperate internationally to save lives and prevent migrant deaths and injuries through joint search and rescue operations, and standardized collection and exchange of information; to do so, the following actions relevant to unsafe mixed migration by sea had been suggested as being instrumental:

.1 development of procedures and agreements on search and rescue with the primary objective to protect migrants' right to life that refrain from pushbacks at land and sea borders and enhance reception and assistance capacities, while ensuring that the provision of humanitarian assistance for migrants is never criminalized; and

.2 review of the impacts of migration-related policies and laws to ensure that these did not raise or create the risk of migrants going missing, including through identifying dangerous transit routes used by migrants, by working with other States and relevant international organizations to identify contextual risks and establishing mechanisms for preventing and responding to such situations;

.14 the SAR operations for boats with migrants in 2017 had increased by 150% compared to 2016 in the West Mediterranean, while the number of deaths in the same period had increased by 206%;

.15 apart from SAR operations, it was also important to make efforts in the coordination with countries of origin and transit and the annual Euro-African Ministerial Conference on Migration and Development was a good example; and

.16 the problem of irregular mixed migration also affected other regions, such as South Asia.

18.10 In this regard, statements made by the delegations of Italy and Spain and the observers from IOM, UNHCR and EUNAVFOR MED operation SOPHIA are set out in annex 26.

18.11 The Secretary-General recognized the important work of IOM and UNHCR in addressing the root causes of the problems and expressed his sincere appreciation to Member States and the shipping industry for contributing to the rescue of migrants at sea in the Mediterranean Sea, especially to Greece, Italy, Malta and Morocco and to EUNAVFOR MED operation SOPHIA. He also expressed his recognition and special thanks to Italy, EUNAVFOR MED operation SOPHIA and the EC for their support for the capacity-building efforts to establish SAR services in Libya.

18.12 The Committee noted that since the date of the launch of the Inter-agency platform for information-sharing on migrant smuggling by sea in GISIS[6] on 6 July 2015, only six incidents had been entered in the database.

18.13 Having noted the low level of reporting of migrant incidents at sea and on suspected smugglers and vessels, as requested by the *Interim measures for combating unsafe practices associated with the trafficking, smuggling or transport of migrants by sea* (MSC.1/Circ.896/Rev.2), the Committee encouraged Member States to provide and update the information included in the appendix via the Inter-agency platform for information-sharing on migrant smuggling by sea in GISIS.

18.14 The Committee invited the Secretariat and participating United Nations Agencies to inform MSC 100 of the progress made with the global compact for migration and the global compact on refugees.

19 APPLICATION OF THE COMMITTEE'S PROCEDURES ON ORGANIZATION AND METHOD OF WORK

19.1 The Committee recalled that the Assembly, at its thirtieth session, having adopted resolutions A.1110(30) on *Strategic plan for the organization for the six-year period 2018 to 2023* and A.1111(30) on *Application of the Strategic Plan of the Organization*, requested the Council and the committees to review and revise, during the 2018-2019 biennium, their Method of work, taking into account resolution A.1111(30).

19.2 The Committee noted that MEPC 72 had considered document MEPC 72/14/Rev.1 (Secretariat), containing the draft revised MSC-MEPC.1 circular on organization and method of work of the Maritime Safety Committee and the Marine Environment Protection Committee and their subsidiary bodies, and approved the revised Committees' Method of work, subject to concurrent approval by MSC 99.

19.3 Taking into account the outcome of MEPC 72 (MSC 99/2/4), the Committee considered document MSC 99/19 (Secretariat), containing the draft revised Committees' method of work, as approved by MEPC 72, and approved MSC-MEPC.1/Circ.5/Rev.1 on *Organization and method of work of the Maritime Safety Committee and the Marine Environment Protection Committee and their subsidiary bodies*.

[6] Refer to Global Integrated Shipping Information System (GISIS) – Inter-agency platform for information-sharing on migrant smuggling by sea (Circular Letter No.3569).

20 WORK PROGRAMME

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

Proposal for a new output to amend the definition of 'Group A' in the IMSBC Code

20.1 The Committee considered document MSC 99/20/7 (Australia et al.), proposing to amend the definition of 'Group A' in the IMSBC Code to include phenomena other than "liquefaction" and, taking into account that there was already an existing output for considering amendments to the IMSBC Code on the 2018-2019 biennial agenda of the CCC Sub-Committee and the provisional agenda for CCC 5, agreed to instruct CCC 5 to consider the proposed amendment referred to in document MSC 99/20/7 under its existing agenda item on "Amendments to the IMSBC Code and supplements".

20.2 In commenting on the above proposal, some delegations were of the view that the amendment of the definition of 'Group A' to include phenomena other than "liquefaction" in the IMSBC Code would require consequential work to also revise other sections of the IMSBC Code, e.g. section 7, including the impact on other existing 'Group A' cargoes; and that the phenomenon of "dynamic separation" might need to be further examined.

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

20.3 The Committee confirmed the Sub-Committee's biennial agenda and the provisional agenda for CCC 5, as set out in annexes 21 and 22, respectively; and requested the Secretariat to inform MEPC 73 accordingly.

Sub-Committee on Human Element, Training and Watchkeeping (HTW)

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

20.4 The Committee confirmed the Sub-Committee's biennial agenda and the provisional agenda for HTW 5, as set out in annexes 21 and 22, respectively.

Sub-Committee on Implementation of IMO Instruments (III)

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

20.5 The Committee, having recalled its instruction to III 5 to consider the consolidated audit reports (see paragraph 2.5.2), confirmed the Sub-Committee's biennial agenda and the provisional agenda for III 5, as set out in annexes 21 and 22, respectively; and requested the Secretariat to inform MEPC 73 accordingly.

Sub-Committee on Navigation, Communications and Search and Rescue (NCSR)

Proposal for a new output on development of performance standards for a Navigation Decision Support System for Collision Avoidance

20.6 The Committee considered document MSC 99/20/1 (Israel and Poland), proposing to develop performance standards for a Navigation Decision Support System for Collision Avoidance in order to achieve effective and harmonized means of support for the master or officer of the watch in optimizing the course of action in situations of danger of collision, in compliance with COLREG 1972.

20.7 The majority of delegations that intervened were of the view that more information would be needed to take a decision on the development of such performance standards which were not required by any mandatory IMO instrument. Other delegations expressed concerns on aspects such as the compelling need for the proposal, additional burden and costs, the impact on the human element and the compatibility of the system with the current cautions on the use of AIS contained in the *Revised guidelines for the onboard operational use of shipborne automatic identification systems (AIS)* (resolution A.1106(29)).

20.8 Consequently, the Committee did not accept, at this stage, the proposed new output and invited the co-sponsors to submit a revised proposal with more information to a future session, taking into account the outcome of the discussion at this session.

Proposal for a new output on revision of the Guidelines for vessel traffic services (resolution A.857(20)

20.9 The Committee considered document MSC 99/20/3 (Australia et al.), proposing to revise the *Guidelines for vessel traffic services* (resolution A.857(20)) to ensure that they were modernized/updated and continued to serve as an effective instrument, providing a clear framework to implement vessel traffic services globally in a harmonized manner; and agreed to include in its post-biennial agenda an output on "Revision of the *Guidelines for vessel traffic services* (resolution A.857(20))" with one session needed to complete the item, assigning the NCSR Sub-Committee as the coordinating organ.

Proposal for a new output on application of the Quasi-Zenith Satellite System (QZSS) in the maritime field

20.10 The Committee considered document MSC 99/20/4 (Japan), proposing to recognize the Japanese regional navigation satellite system "Quasi-Zenith Satellite System (QZSS)" as a future component of the World-Wide Radionavigation System (WWRNS) and develop performance standards for shipborne QZSS receiver equipment, together with documents MSC 99/20/12 and Corr.1 (Germany) commenting on the proposal.

20.11 Following discussion, the Committee agreed to include in its post-biennial agenda an output on "Recognition of the Japanese regional navigation satellite system Quasi-Zenith Satellite System (QZSS) and development of performance standards for shipborne satellite navigation system receiver equipment", with two sessions needed to complete the item, assigning the NCSR Sub-Committee as the coordinating organ.

Biennial status report of the Sub-Committee and provisional agenda for NCSR 6

20.12 The Committee, having recalled its earlier decisions regarding the workload of the NCSR Sub-Committee (see paragraph 12.26), approved the Sub-Committee's biennial status report and the provisional agenda for NCSR 6, as set out in annexes 21 and 22, respectively.

Sub-Committee on Ship Design and Construction (SDC)

Biennial status report of the Sub-Committee and provisional agenda for SDC 6

20.13 The Committee, having recalled the following decisions taken earlier:

.1 to include the output on "Safety measures for non-SOLAS ships operating in polar waters" in the biennial agenda of the Sub-Committee and the provisional agenda for SDC 6 (see paragraph 7.16); and

.2 to delete the output on "Amendments to SOLAS regulation II-1/8-1.2 on the availability of passenger ships' electrical power supply in cases of flooding from side raking damage" (see paragraph 10.6.5),

approved the Sub-Committee's biennial status report and the provisional agenda for SDC 6, as set out in annexes 21 and 22, respectively.

Sub-Committee on Ship Systems and Equipment (SSE)

Revision of the lowering speed of survival craft and rescue boats

20.14 The Committee considered document MSC 99/20/2 (Japan), proposing amendments to the International Life-saving Appliance Code (LSA Code) to prevent excessive lowering speed of survival craft and rescue boats.

20.15 Some delegations were of the view that this proposal should be part of the existing output on "Revision of SOLAS chapter III and the LSA Code to remove gaps, inconsistencies and ambiguities based on the safety objectives, functional requirements and expected performance for SOLAS chapter III" in order to avoid a duplication of work for the Sub-Committee. However, recognizing that there was no clear timeline for this post-biennial output, and taking into account the importance of the issue, the Committee agreed to include in its post-biennial agenda an output on "Development of amendments to the LSA Code to revise the lowering speed of survival craft and rescue boats for cargo ships", with two sessions needed to complete the item, assigning the SSE Sub-Committee as the coordinating organ.

20.16 Notwithstanding the above decision, the Committee recognized that, if the SSE Sub-Committee decided in the future to commence work on the revision of SOLAS chapter III and the LSA Code, it could decide to include in that work the new output approved at this session.

20.17 The Committee further agreed, in accordance with MSC.1/Circ.1481 and MSC.1/Circ.1500, that:

.1 the amendments to be developed should apply to all cargo ships to which SOLAS chapter III applied and to all launching appliances using falls and winches;

.2 the instrument to be amended was the LSA Code, paragraph 6.1.2.8; and

.3 the amendments to be developed should enter into force on 1 January 2024, provided that they were adopted before 1 July 2022.

20.18 The delegation of France raised concerns that the proposal might be an incentive to increase the height of survival craft and rescue boat storage position, in contradiction to the provisions of SOLAS regulation III-13, which required that "each survival craft shall be stowed as near the water surface as is safe and practicable".

Proposal for a new output on fire resistance requirements of damping materials for reducing noise and vibration level applied in "A" and "B" class divisions

20.19 The Committee considered documents MSC 99/20/5 and MSC 99/INF.6 (China), proposing to develop new fire resistance requirements for damping materials applied in "A" and "B" class divisions to ensure fire safety and the safety of human life at sea and harmonize the requirements of SOLAS and the Code on Noise Levels.

20.20 The majority of the delegations that intervened were of the view that SOLAS and the FTP Code already contained adequate safety requirements for damping materials and, therefore, the Committee agreed not to accept the proposed new output.

Proposal for a new output to amend the carriage requirements for liferafts

20.21 The Committee considered document MSC 99/20/6 (China), proposing to equip all passenger and cargo ships with automatically self-righting or canopied reversible liferafts (except for liferafts with a capacity of no more than six persons), and, consequentially, to amend regulations 21, 26 and 31 of SOLAS chapter III and paragraphs 4.2 and 4.3 of chapter IV of the LSA Code.

20.22 Recalling the previous discussions, as reflected in paragraph 20.15, the Committee agreed to include in its post-biennial agenda an output on "Amendments to SOLAS chapter III and chapter IV of the LSA Code to require the carriage of self-righting or canopied reversible liferafts for new ships", with two sessions needed to complete the item, assigning the SSE Sub-Committee as the coordinating organ.

20.23 The Committee further agreed, in accordance with MSC.1/Circ.1481 and MSC.1/Circ.1500, that:

.1 the amendments to be developed consisted of new requirements for new passenger and cargo ships to be equipped with automatically self-righting or canopied reversible liferafts;

.2 the instruments to be amended were SOLAS regulations III/21, III/26 and III/31, and the LSA Code, chapter IV, paragraphs 4.2 and 4.3; and

.3 the amendments to be developed should enter into force on 1 January 2024, provided that they were adopted before 1 July 2022.

Proposal for a new output to amend paragraph 4.4.7.6 of the LSA Code

20.24 The Committee considered documents MSC 99/20/8 and MSC 99/20/8/Add.1 (Marshall Islands et al.), proposing to amend paragraph 4.4.7.6 of the LSA Code in order to ensure adequate safety standards for lifeboats and rescue boats with single fall and hook systems, and agreed to include in the 2018-2019 biennial agenda of the SSE Sub-Committee and the provisional agenda for SSE 6 an output on "Amendments to paragraph 4.4.7.6.17 of the LSA Code concerning single fall and hook systems with on-load release capability", with a target completion year of 2019.

20.25 The Committee further agreed, in accordance with MSC.1/Circ.1481 and MSC.1/Circ.1500, that:

.1 the amendments to be developed should apply to new installations on or after the entry into force of the amendment to the LSA Code, and to existing installations only in cases of replacement;

.2 the instrument to be amended was the LSA Code, paragraph 4.4.7.6.17; and

.3 the amendments to be developed should enter into force on 1 January 2022, provided that they were adopted before 1 July 2020.

Code of safety for diving systems (resolution A.831(19)) and the Guidelines and specifications for hyperbaric evacuation systems (resolution A.692(17))

20.26 The Committee considered document MSC 99/20/9 (Russian Federation et al.), proposing to enhance commercial diving safety by amending the Code (resolution A.831(19)) and the Guidelines (resolution A.692(17)) to harmonize them with current industry best practice and achieve reinstatement of the Code as the minimum standard for diving and hyperbaric evacuation system safety, and agreed to include in its post-biennial agenda an output on "Revision of the Code of safety for diving systems (resolution A.831(19)) and the *Guidelines and specifications for hyperbaric evacuation systems* (resolution A.692(17))", with two sessions needed to complete the item, assigning the SSE Sub-Committee as the coordinating organ.

Proposal for a new output to amend the Standardized life-saving appliance evaluation and test report forms

20.27 The Committee considered document MSC 99/20/10 (United States and ILAMA), proposing to amend the Standardized life-saving appliance evaluation and test report forms (MSC/Circ.980 and addenda), to incorporate the amendments to the LSA Code and the *Revised recommendation on testing of life-saving appliances* (resolution MSC.81(70)) adopted/approved since the forms were approved, together with documents MSC 99/20/11 (Dominica), supporting the proposal, and MSC 99/20/13 (ISO), proposing minor corrections to references to standards for material tests for inflatable liferafts and hydrostatic release unit membranes as a consequence of references to outdated/withdrawn standards.

20.28 In the ensuing discussion, one delegation expressed the view that the scope of the amendments to the evaluation and test report forms should be limited to including the amendments to the LSA Code and resolution MSC.81(70) adopted since 2001, and not to consider any other amendments.

20.29 Consequently, the Committee agreed to include in the 2018-2019 biennial agenda of the SSE Sub-Committee and the provisional agenda for SSE 6 an output on "Revision of the Standardized life-saving appliance evaluation and test report forms (MSC/Circ.980 and addenda)", with a target completion year of 2020.

20.30 The Committee further agreed to request the Secretariat to prepare a document regarding the proposal for minor corrections to the *Revised recommendation on testing of life-saving appliances* (resolution MSC.81(70)) contained in document MSC 99/20/13, for consideration at the next session.

Biennial status report of the Sub-Committee and provisional agenda for SSE 6

20.31 The Committee approved the Sub-Committee's biennial status report and the provisional agenda for SSE 6, as set out in annexes 21 and 22, respectively.

Endorsement of new outputs

20.32 In accordance with the relevant provisions of the *Application of the Strategic Plan of the Organization* (resolution A.1111(30)), the Committee, having approved the Sub-Committees' biennial agendas and the provisional agendas for their forthcoming sessions, invited the Council to endorse, for inclusion in the current list of outputs, the following two new outputs agreed by it:

.1 Amendments to paragraph 4.4.7.6.17 of the LSA Code concerning single fall and hook systems with on-load release capability (paragraph 20.24); and

.2 Revision of the Standardized life-saving appliance evaluation and test report forms (MSC/Circ.980 and addenda) (paragraph 20.27).

Biennial status report of the Committee

20.33 Having recalled that the status of outputs would be produced after the session as an annex to its report to avoid any unnecessary duplication of work, the Committee invited the Council to note the report on the status of outputs of MSC for the 2018-2019 biennium, as set out in annex 23.

Post-biennial agenda of the Committee

20.34 The Committee, having noted that the updated post-biennial agenda would be produced after the session as an annex to its report to avoid any unnecessary duplication of work, invited the Council to note the post-biennial agenda of MSC, as set out in annex 24.

Intersessional meetings

20.35 The Committee approved, subject to endorsement by Council, the holding of the following intersessional meetings:

.1 the fourteenth meeting of the Joint IMO/ITU Experts Group on Maritime Radiocommunication Matters, from 3 to 7 September 2018;

.2 the thirtieth meeting of the Editorial and Technical (E&T) Group for the IMSBC Code, from 17 to 21 September 2018;

.3 the twenty-fifth meeting of the ICAO/IMO Joint Working Group on Search and Rescue, from 17 to 21 September 2018;

.4 the second meeting of the IMO/IHO Harmonization Group on Data Modelling (HGDM), from 29 October to 2 November 2018;

.5 the fifteenth meeting of the Joint IMO/ITU Experts Group on Maritime Radiocommunication Matters, to take place in 2019; and

.6 the twenty-sixth meeting of the ICAO/IMO Joint Working Group on Search and Rescue, to take place in 2019.

Substantive items for inclusion in the agendas of MSC 100 and MSC 101

20.36 Having considered the proposals in document MSC 99/WP.6, the Committee agreed to the substantive items to be included in the agendas of its 100th and 101st sessions, as set out in annex 25.

Establishment of working and drafting groups during MSC 100

20.37 The Committee, taking into account the decisions made under various agenda items, anticipated that working and drafting groups on the following subjects could be established at MSC 100:

.1 maritime autonomous surface ships;

.2 goal-based standards;

.3 safety measures for non-SOLAS ships operating in polar waters; and

.4 consideration and adoption of amendments to mandatory instruments.

Duration and dates of the next two sessions

20.38 The Committee noted that MSC 100 had been scheduled to take place from 3 to 7 December 2018; and that MSC 101 had been tentatively scheduled to take place from 5 to 14 June 2019.

21 ANY OTHER BUSINESS

Technical cooperation activities related to maritime safety, maritime security and facilitation

21.1 In considering document MSC 99/21 (Secretariat), the Committee noted the information provided on a number of activities aiming to assist countries in the implementation of the provisions of relevant IMO instruments that had been implemented by the Maritime Safety Division (MSD) during 2017 as part of the IMO Integrated Technical Cooperation Programme (ITCP).

21.2 In this connection, the Committee urged Member States that had not yet provided their Country Maritime Profiles to do so as soon as possible by including the pertinent information in the relevant GISIS module; and those who had already done so, to update their entries as and when necessary, so as to provide current and correct information.

IMO/IACS cooperation on the IACS Quality System Certification Scheme (QSCS)

21.3 The Committee recalled that MSC 98, having noted the information provided by the IMO consultant/observer on the IACS QSCS and its transition to accredited certification bodies (ACBs) (MSC 98/22/1), had requested the Secretariat to continue the arrangement for IMO participation in the Scheme for the next two years, with financial contributions provided by IACS, and to provide a report to this session.

21.4 In considering document MSC 99/21/1 (Secretariat), containing the latest report submitted by the IMO observer, the Committee noted recent developments and activities undertaken by IACS for the continued improvement of the Scheme. These included the requirement to meet the updated ISO standard 9001:2015 within the compliance date of 15 September 2018 and the developments during 2017/2018 where ACBs had conducted audits and assessed compliance with the Scheme.

21.5 The Committee agreed to the indefinite continuation of the IMO consultant/observer participation in the Scheme at no cost to the Organization, subject to any future decision of the Committee and requested the Secretariat to report on developments to MSC 101.

21.6 The Committee thanked Mr. David Howard for his contribution to the work of the Organization in his role as IMO consultant/observer for the past nine years, having noted that he would retire at the end of June this year on completion of his current contract. In this regard, the Committee noted that the Secretary-General had appointed Mr. Andrew Winbow, former Director/ASG of the Maritime Safety Division of the Organization, as the new IMO consultant/observer.

Global Integrated Shipping Information System (GISIS)

21.7 The Committee noted information provided by the Secretariat (MSC 99/21/9 and MSC 99/INF.2) on developments regarding the new GISIS module on National Maritime Legislation, welcomed the module and urged Member States to use the information therein in preparation for their own audits.

Consideration of lessons learned from a casualty during the sea trial of an azimuth stern drive tug

21.8 The Committee recalled that China had provided an initial report (MSC 98/22/5) to MSC 98 on the lessons learned from the casualty during the sea trial of the azimuth stern drive (ASD) tug **JMS Delta** and had proposed to conduct a gap analysis of the existing regulations of the 1974 SOLAS Convention and the 1978 STCW Convention.

21.9 The Committee considered the follow-up reports by China (MSC 99/21/3/Rev.1 and MSC 99/21/4) on the outcome of the aforementioned gap analysis of the existing SOLAS regulations, for azimuth propulsion and steering systems and specific requirements of the STCW Code for operating personnel of azimuth propulsion and steering systems, having noted the intention of China to propose two new outputs for consideration at MSC 100, firstly to develop non-mandatory guidelines on training of azimuth propulsion and steering systems operating personnel; and secondly to develop a unified interpretation regarding azimuth stern drive tug propulsion and steering systems, and their testing and drills.

21.10 The Committee invited the delegation of China, when preparing the proposals for new outputs, to take into account that the *Standards for manoeuvrability* (resolution MSC.137(76)) did not apply to ASD tugs, because they were developed for ships with traditional propulsion and steering systems but that, in accordance with paragraph 1.2 of the Standards, they could be updated, taking into account new technologies, research and development, and experience gained with their practical application.

Consideration of fire protection of control stations on cargo ships

21.11 In considering document MSC 99/21/8 (Belgium and Luxemburg), the Committee noted the view of the submitters that the provision in SOLAS regulation II-2/7.5.5 on the need for control stations on cargo ships to be fitted with fixed fire detection and fire alarm system was unclear and needed to be clarified, since section 5 of SOLAS regulation II-2/7 related to protection of accommodation and service spaces and control stations failed to mention the applicability of regulation II-2/7.5.5 to control stations.

21.12 In this connection, the Committee noted that FP 56 had considered a proposal to add "and in control stations" to regulations II-2/7 5.5.1, 5.5.2 and 5.5.3, but had decided to invite Member States and international organizations to submit a relevant proposal for a new output

and had agreed, as an interim measure, to include an interpretation proposed by IACS (FP 56/9/9) in the *Unified interpretations of SOLAS chapter II-2 and the FSS and FTP Codes* (MSC.1/Circ.1456).

21.13 Having noted that several delegations were of the view that further careful consideration of the proposal was required, the Committee invited the submitters to prepare a proposal for a relevant new output in accordance with the Committees' method of work (MSC-MEPC.1/Circ.5), for consideration at a future session.

Requirements for practical seating arrangements in survival craft

21.14 The Committee considered a proposal by the Marshall Islands and The Royal Institution of Naval Architects (MSC 99/21/11) to revise the current basic seat space dimensions in survival craft to allow for additional space, taking into account recent anthropometric research (SSE 4/3), and to replace the associated figure in paragraph 4.4.2.2.2 of the LSA Code, asserting that there was an urgent need for the development of a minimum standard to allow for mobility of persons in a survival craft, as demonstrated during SAR exercises.

21.15 During the discussion, the following views were expressed:

.1 lifeboat safety was an important issue and lifeboat designers needed to address human element considerations;

.2 DE 51 had already considered the matter of seating width but did not conclude on this matter because of lack of data; furthermore, while the proposal to revise the current basic seat space dimensions was supported in general, it was a complicated matter that would have a significant impact on ship design, bearing in mind that lifeboats would be required to be significantly larger to accommodate the same amount of persons;

.3 the matter should be addressed under the current SSE output related to the revision of SOLAS chapter III and the LSA Code;

.4 the proposal required the LSA Code to be substantially amended and, therefore, required a new output;

.5 if the proposal was limited to lifeboats on ships operating in polar waters only, then this could be considered under the existing SSE output on "Consequential work related to the new Polar Code", whereas a new output would be required if it was to be applicable to all ships; and

.6 space requirements for persons were increasing and since ships more frequently transited remote areas, the time until rescue might be significant and, therefore, the issue needed to be addressed; however, it also required due consideration of technical feasibility and economic viability.

21.16 Having noted the above views and the general support for the proposal, the Committee invited Member States and international organizations to submit proposals for a relevant new output in accordance with the Committees' method of work (MSC-MEPC.1/Circ.5) to a future session.

Mandatory weighing of containers

21.17 The Committee noted information provided by South Africa (MSC 99/INF.4) on research conducted by the Citrus Growers Association in South Africa regarding discrepancies between the actual tare mass of reefer containers versus the tare mass indicated on the container, where in many cases the actual weight exceeded the declared gross mass of the container.

21.18 The Committee also noted the results of a survey carried out in mid-2017 by The Federation of National Associations of Ship Brokers and Agents (MSC 99/INF.10) in order to ascertain if the mandatory requirements in SOLAS regulations VI/2.4 to VI/2.6 for the verification of the gross mass of packed containers were correctly implemented by Member States and had resulted in any discernible changes to trade patterns. It was noted that the survey had concluded that the implementation of the requirements had proceeded reasonably efficiently with very few issues being reported.

IALA standards for training and certification of VTS personnel

21.19 The Committee recalled that, in 2002, it had approved the *IALA standards for training and certification of vessel traffic service (VTS) personnel* (MSC/Circ.1065), and that the entry into force of the 2010 Manila amendments to the STCW Convention and Code had rendered the references within paragraph 1 of the annex to the circular obsolete.

21.20 In considering amendments to the IALA Standards proposed by IALA (MSC 99/21/2), the Committee noted that they referred solely to IALA Standards and that IALA had published a further model course, V-103/5 on the revalidation process for VTS qualification and certification, in June 2016.

21.21 Consequently, the Committee, having noted support for the update of the IALA Standards, approved MSC.1/Circ.1065/Rev.1 on *IALA standards for training and certification of vessel traffic service (VTS) personnel.*

Participation in the WMO Voluntary Observing Ships scheme

21.22 The Committee considered a proposal by WMO (MSC 99/21/5) to revise *Participation in the WMO Voluntary Observing Ships Scheme* (MSC.1/Circ.1293) to reflect the developments in meteorological services in the field of ship-based marine meteorological and oceanographic observations and the WMO Scheme, having noted that the circular referred solely to WMO information.

21.23 The Committee, having noted general support for the proposal, recognized the value of the Scheme, invited Member States to encourage shipowners and operators to participate actively, and invited industry bodies and non-governmental organizations to promote the Scheme.

21.24 Consequently, the Committee approved MSC.1/Circ.1293/Rev.1 on *Participation in the WMO Voluntary Observing Ships Scheme*.

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

21.25 The Committee considered a proposal by the Democratic People's Republic of Korea (MSC 99/21/6) to amend the *List of certificates and documents required to be carried on board ships, 2017* (FAL.2/Circ.131-MEPC.1/Circ.873-MSC.1/Circ.1586-LEG.2/Circ.3), with a view to avoiding the use of two different terms, i.e. "stability information" and "intact stability booklet".

21.26 In agreeing to this proposal, the Committee noted that consequential amendments to the *Procedures for port State control, 2017* (resolution A.1119(30)), the Code of Practice for the Safe Loading and Unloading of Bulk Carriers (BLU Code), the IMSBC Code, and the *Guidelines for verification of damage stability requirements for tankers* (MSC.1/Circ.1461) might need to be considered.

21.27 Consequently, the Committee requested the Secretariat to issue a corrigendum to the List, and invited proposals regarding consequential amendments to the Procedures for Port State Control, the BLU and IMSBC Codes and the aforementioned Guidelines (MSC.1/Circ.1461) to the SDC and CCC Sub-Committees, as appropriate, for consideration under the agenda item on "Any other business".

Continuous update and use of the list of non-mandatory instruments

21.28 Having considered a request by the Democratic People's Republic of Korea (MSC 99/21/12 and Corr.1) for clarification on the relationship between the *List of codes, recommendations, guidelines and other safety- and security-related non-mandatory instruments (*MSC.1/Circ.1371) and the "Non-mandatory Instruments" module of GISIS, the Committee agreed to discontinue MSC.1/Circ.1371 and invited Member States to consult solely the aforementioned GISIS module.

21.29 In this connection, the Committee requested the Secretariat to take the necessary action to amend the related footnote in paragraph 1.2.3.2 of the ISM Code.

IMO Member State Audit Scheme

21.30 The Committee considered the guidance provided by WMO (MSC 99/21/10) in the context of resolution A.1067(28) on *Framework and Procedures for the IMO Member State Audit Scheme*, within the area of competence of WMO, concerning service standards of met-ocean information services complying with SOLAS regulation V/5.

21.31 Having noted concerns that certain parts of the guidance for Member States and IMO auditors for the implementation of SOLAS regulation V/5, contained in the annex to document MSC 99/21/10, needed to be reviewed and clarified, the Committee invited WMO to liaise with interested delegations in order to amend the proposed guidance accordingly and to submit a new proposal to a future session, with a view to including the guidance in future revisions of the Auditor's Manual, as appropriate.

Polar Code matters

Proposed correction to part I-A of the Polar Code

21.32 The Committee considered a submission by the Russian Federation (MSC 99/21/13) concerning a perceived error in paragraph 1.3.1 of part I-A of the Polar Code, which currently states that "every ship to which this Code applies shall have on board a valid Polar Ship Certificate", rather than "every ship to which this part applies", which the submitters argue would be the correct wording.

21.33 The Committee agreed that paragraph 1.3.1 of part I-A of the Polar Code should be amended accordingly and requested the Secretariat to effect the necessary correction by means of a Note Verbale of Rectification.

Industry guidance for the development of a Polar Water Operational Manual

21.34 The Committee noted information provided by ICS and OCIMF (MSC 99/INF.12) on their initiative to produce industry guidance for the development of a Polar Water Operational Manual (PWOM), which must be carried on board ships in accordance with chapter 2 of part I-A of the Polar Code; and that it was anticipated that the joint industry guidance, once completed, would be submitted to the Committee for information and for any action that may be deemed appropriate.

Unified interpretation of the term "conning position" referred to in SOLAS regulations

21.35 The Committee considered a proposal by the Democratic People's Republic of Korea (MSC 99/21/14) for the development of a unified interpretation of the term "conning position" which is referenced in SOLAS regulations, indicating that the undefined term was causing problems as Contracting Governments might interpret it differently.

21.36 In the ensuing discussion, the following views were expressed:

.1 the proposal did not establish what the actual problem was or provide evidence of the need to take action;

.2 the development of a unified interpretation was not appropriate at this time as existing guidelines were clear; and

.3 the issue had already been debated in previous sessions of the NAV and NCSR Sub-Committees and was adequately addressed in ISO 8468:2002, paragraph 3.1.9.

21.37 Consequently, the Committee agreed not to consider the proposal further.

Improved safety of pilot transfer arrangements

21.38 The Committee noted information provided by the International Maritime Pilots' Association (MSC 99/INF.11) on survey results on improved safety of pilot transfer arrangements and, in particular, that the inclusion of pilot ladders in the ships' safety equipment inspection regime had not had an effect on the standards found.

Information on closure of seaports in the Autonomous Republic of Crimea and the city of Sevastopol

21.39 The Committee noted information provided by Ukraine (99/21/7) on the closure of seaports in the Autonomous Republic of Crimea and the city of Sevastopol, together with information provided by the Russian Federation (MSC 99/21/17) in response to the submission by Ukraine.

21.40 In this connection, the Committee recalled that MSC 97 (MSC 97/22, paragraph 4.12) had agreed that IMO was not the appropriate forum to discuss the matter. However, recognizing the importance of security and safety of navigation, MSC 97 had invited Member States and interested parties to notify the Organization of any threats to the security and safety of navigation in the north-eastern part of the Black Sea, for circulation to all Member States in accordance with IMO procedures.

21.41 The delegations of Australia, Canada, Estonia, France and the United States expressed their views on the need to maintain the territorial integrity of Ukraine. The delegations of Croatia, Denmark, Finland, Germany, Iceland, Ireland, Luxembourg, the Netherlands, Norway, Spain, Sweden and the United Kingdom and the EC observer associated themselves with the statements made by the delegations of Estonia and France.

21.42 Relevant statements by Estonia, the Russian Federation, Ukraine and the United States are attached in annex 26.

The Ocean Cleanup's deployment in the North Pacific

21.43 The Committee, having considered information submitted by the Netherlands and Vanuatu (MSC 99/21/15) concerning the work of The Ocean Cleanup, a non-profit organization of the Netherlands focused on cleaning the plastic debris floating in the five main ocean gyres, starting with the North Pacific Gyre in 2018, and on safety measures taken by them to minimize any hindrance to shipping, thanked the submitters for the information and invited them to update the Committee on progress made at a future session.

Expressions of appreciation

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

- Mr. John Akhurst (Bahamas) (on retirement)
- Captain Nigel Campbell (South Africa) (on retirement)
- Mr. Charles Darr (CLIA) (on new duties)
- Mr. Milhar Fuazudeen (IMO) (on retirement)
- Mr. Ari Gudmundsson (FAO) (on retirement)
- Mr. Peter Hinchliffe (ICS) (on retirement)
- Mr. David Howard (IMO Consultant) (on retirement)
- Mr. Ashok Mahapatra (IMO) (on retirement)
- Mr. Miguel Nuñez (Spain) (on new duties).

22 ACTIONS REQUESTED OF OTHER IMO ORGANS

22.1 The Assembly, at its thirty-first session, is invited to:

.1 note the adoption by the Committee of amendments to the 1974 SOLAS Convention and related mandatory codes, and the approval/adoption of non-mandatory instruments (paragraphs 3.62 to 3.78 and 3.81 and annexes 1 to 8 and 10 to 13);

.2 note the adoption by the Committee of amendments to the 1988 Load Lines Protocol (paragraphs 3.79 and 3.80 and annex 9);

.3 note the establishment of new routeing measures, adopted in accordance with resolution A.858(20), which were disseminated by means of SN.1/Circ.336 (paragraph 12.3); and

.4 note that the Committee revised, concurrently with MEPC 72, the *Organization and method of work of the Maritime Safety Committee and the Marine Environment Protection Committee and their subsidiary bodies*, as requested by resolution A.1111(30), for dissemination by means of MSC-MEPC.1/Circ.5/Rev.1 (paragraph 19.3).

22.2 The Council, at its 120th session, is invited to:

.1 consider the report of the ninety-ninth session of the Maritime Safety Committee and, in accordance with Article 21(b) of the IMO Convention, transmit the report, with its comments and recommendations, to the thirty-first session of the Assembly;

.2 note that the Committee concurred with MEPC 72 to refer the first Consolidated Audit Summary Report (CASR) to III 5 for consideration and analysis and instructed it to report the outcome of its considerations to the Committee in due course (paragraph 2.5.2);

.3 note the adoption by the Committee of amendments to the 1974 SOLAS Convention and related mandatory codes, and the approval/adoption of non-mandatory instruments (paragraphs 3.62 to 3.78, and 3.81 and annexes 1 to 8 and 10 to 13);

.4 note the adoption by the Committee of amendments to the 1988 Load Lines Protocol (paragraphs 3.79 and 3.80 and annex 9);

.5 note the action taken by the Committee on issues related to maritime security, in particular, the adoption of resolution MSC.448(99) on *Revised guidelines on the prevention of access by stowaways and the allocation of responsibilities to seek the successful resolution of stowaway cases*, and the revision of the model course on Security Awareness Training for Port Facility Personnel with Designated Security Duties (section 4 and annex 14);

.6 note the action taken by the Committee on matters related to the regulatory scoping exercise for the use of maritime autonomous surface ships, in particular, the approval of a framework for the scoping exercise, including a plan of work (section 5);

.7 note the action taken by the Committee on matters related to goal-based standards, in particular, that IACS and the 12 ROs have submitted their request for the first GBS maintenance of verification audit and that an audit team has been established by the Secretary-General accordingly (paragraphs 6.1 to 6.21 and annex 15);

.8 note the action taken by the Committee on matters related to safety measures for non-SOLAS ships operating in polar waters (section 7);

.9 note the action taken by the Committee in regard to the outcome of the sub-committees reporting to this session (sections 8 to 13);

.10 endorse the decision of the Committee to extend the NCSR Sub-Committee's meeting time for each session to eight days, for a trial period of two sessions starting from NCSR 6 in 2019 (paragraph 12.26);

.11 note the action taken by the Committee in regard to piracy and armed robbery against ships (section 17);

.12 note the outcome of the Committee's consideration in regard to unsafe mixed migration at sea (section 18);

.13 note that the Committee revised, concurrently with MEPC 72, the *Organization and method of work of the Maritime Safety Committee and the Marine Environment Protection Committee and their subsidiary bodies*, as requested by resolution A.1111(30), for dissemination by means of MSC-MEPC.1/Circ.5/Rev.1 (paragraph 19.3).

.14 endorse the decision of the Committee to include two new outputs in its 2018-2019 biennial agenda (paragraph 20.32);

.15 note the status report of the outputs of the Committee for the 2018-2019 biennium (paragraph 20.33 and annex 23);

.16 note the updated post-biennial agenda of the Committee (paragraph 20.34 and annex 24);

.17 endorse the intersessional meetings approved by the Committee for 2018 and 2019 (paragraph 20.35); and

.18 note that the Secretary-General has appointed a new IMO consultant/observer to participate in the IMO/IACS cooperation on the IACS Quality System Certification Scheme (paragraph 21.6).

22.3 The Marine Environment Protection Committee, at its seventy-third session, is invited to:

.1 note that the Committee concurred with MEPC 72 to refer the first Consolidated Audit Summary Report (CASR) to III 5 for consideration and analysis and instructed it to report the outcome of its considerations to the Committee in due course (paragraph 2.5.2);

.2 note that the Committee confirmed that the footnotes contained in the model forms of the Certificate of Fitness under the IBC and IGC Codes should not be excluded from the authentic text (paragraph 3.61);

.3 note the adoption of amendments to the IBC, BCH, GC and EGC Codes related to the Model form of the Certificate of Fitness under the Codes, which are expected to enter into force on 1 January 2020 (paragraphs 3.70 and 3.81 and annexes 5, 11, 12 and 13);

.4 consider the invitation to contribute, as appropriate, to the regulatory scoping exercise on maritime autonomous surface ships by undertaking a review of the instruments under the purview of MEPC (paragraph 5.11);

.5 consider any relevant decisions made by the Committee in regard to its work on maritime autonomous surface ships, with a view to harmonizing the results of respective regulatory scoping exercises (paragraph 5.12);

.6 note that the Committee concurred with the decisions of MEPC 72 on the outcome of the third session of the Joint FAO/IMO Ad Hoc Working Group on Illegal, Unreported and Unregulated Fishing and Related Matters relevant to the Organization (paragraphs 9.6 to 9.36);

.7 note that the Committee concurred with the decisions of MEPC 72 on matters related to the Memorandum of Understanding on Flag State Implementation for Domestic Ships in the Pacific Islands Region (paragraphs 9.37 and 9.38);

.8 note the request of the Committee to keep it informed of matters being considered by PPR 5 that could have safety implications, e.g. the identified candidate control measures for black carbon, sampling points for fuel oil used on board the ships, safety issues with blended fuels and the blending of bulk liquid cargoes (see paragraph 11.2);

.9 note that the Committee concurrently approved MSC-MEPC.1/Circ.5/Rev.1 on *Organization and method of work of the Maritime Safety Committee and the Marine Environment Protection Committee and their subsidiary bodies* (paragraph 19.3);

.10 note the concurrent approval of the biennial agenda of the CCC Sub-Committee and the provisional agenda for CCC 5 (paragraph 20.3 and annexes 21 and 22);

.11 note the concurrent approval of the biennial agenda of the III Sub-Committee and the provisional agenda for III 5 (paragraph 20.5 and annexes 21 and 22); and

.12 concur with the action taken by the Committee to amend the *List of certificates and documents required to be carried on board ships, 2017* (FAL.2/Circ.131-MEPC.1/Circ.873-MSC.1/Circ.1586-LEG.2/Circ.3) (paragraph 21.27).

22.4 The Facilitation Committee, at its forty-second session, is invited to:

.1 note the adoption of resolution MSC.448(99) on *Revised guidelines on the prevention of access by stowaways and the allocation of responsibilities to seek the successful resolution of stowaway cases* (paragraphs 4.8 to 4.18 and annex 14);

.2 consider the invitation to contribute, as appropriate, to the regulatory scoping exercise on maritime autonomous surface ships by undertaking a review of the instruments under the purview of FAL (paragraph 5.11);

.3 consider any relevant decisions made by the Committee in regard to its work on maritime autonomous surface ships, with a view to harmonizing the results of respective regulatory scoping exercises (paragraph 5.12);

.4 note the decisions taken in regard to unsafe mixed migration at sea (section 18); and

.5 concur with the action taken by the Committee to amend the *List of certificates and documents required to be carried on board ships, 2017* (FAL.2/Circ.131-MEPC.1/Circ.873-MSC.1/Circ.1586-LEG.2/Circ.3) (paragraph 21.27).

22.5 The Technical Cooperation Committee, at its sixty-eighth session, is invited to:

.1 note that it should become involved in the work on maritime autonomous surface ships in the future, when implementation issues are considered (paragraph 5.11);

.2 consider incorporating the STCW-F Convention and the FAO/ILO/IMO Document for Guidance on Training and Certification of Fishing Vessel Personnel in technical cooperation activities (paragraph 9.28);

.3 consider developing activities concerning the 2012 Cape Town Agreement and the STCW-F Convention, taking into account the FAO Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing and the 2007 Work in Fishing Convention, with a view to promoting their worldwide implementation, involving not only Administrations but also other relevant stakeholders (paragraph 9.33); and

.4 note the outcome of the Committee's considerations under agenda item 15 (Capacity-building for the implementation of new measures) (paragraph 15.5).

22.6 The Legal Committee, at its 106th session, is invited to:

.1 consider any relevant decisions made by MSC in regard to its work on maritime autonomous surface ships, with a view to harmonizing the results of their respective regulatory scoping exercises (paragraphs 5.11 and 5.12); and

.2 concur with the action taken by the Committee to amend the *List of certificates and documents required to be carried on board ships, 2017* (FAL.2/Circ.131-MEPC.1/Circ.873-MSC.1/Circ.1586-LEG.2/Circ.3) (paragraph 21.27).

(*The annexes will be issued as addenda to this document*)