

SUB-COMMITTEE ON CARRIAGE OF
CARGOES AND CONTAINERS
1st session
Agenda item 13

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DRAFT REPORT TO THE MARITIME SAFETY COMMITTEE

1 GENERAL

INTRODUCTION

1.1 The Sub-Committee on Carriage of Cargoes and Containers (CCC) held its first session from 8 to 12 September 2014 under the chairmanship of Mr. Xie Hui (China), who was unanimously elected as Chairman for 2014 at the opening of the session. The Vice-Chairman, Mr. Patrick Van Lancker (Belgium), who was unanimously elected as Vice-Chairman for 2014 at the opening of the session, was also present.

1.2 The session was attended by delegations from Member Governments, United Nations and specialized agencies, observers from international organizations and non-governmental organizations in consultative status, as listed in document CCC 1/INF.1.

SECRETARY-GENERAL'S OPENING ADDRESS

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

CHAIRMAN'S REMARKS

1.4 In responding, the Chairman thanked the Secretary-General for his words of guidance and encouragement and assured the Secretary-General that his advice and requests would be given every consideration in the deliberations of the Sub-Committee.

ADOPTION OF THE AGENDA AND RELATED MATTERS

1.5 The Sub-Committee adopted the agenda (CCC 1/1/Rev.2) and agreed to be guided during the session by the annotated agenda (CCC 1/1/1/Rev.1) and the proposed working arrangements for the session (CCC 1/1/2). The agenda, as adopted, with the list of documents considered under each agenda item, is set out in document CCC 1/INF.[...].

2 DECISIONS OF OTHER IMO BODIES

2.1 The Sub-Committee noted the outcomes of A 28, SDC 1, HTW 1, SSE 1, MEPC 66, MSC 93 and C 112 relevant to the work of the Sub-Committee, as reported in documents CCC 1/2 and CCC 1/2/1, and took them into account in its deliberations when dealing with relevant agenda items.

2.2 The Sub-Committee also noted in particular that MSC 93 had approved the *Interim guidance on drafting of amendments to the 1974 SOLAS Convention and related mandatory instruments* (MSC.1/Circ.1483) and instructed its subsidiary bodies to use the interim guidance during the preparation of amendments to the 1974 SOLAS Convention and related mandatory instruments. MSC 93 also invited interested parties and the subsidiary bodies to submit recommendations and proposals for improvement after taking into account the experience gained from the use of the interim guidance.

2.3 In this context, the Sub-Committee further noted that MSC 93 had also approved the *Guidance on entry into force of amendments to the 1974 SOLAS Convention and related mandatory instruments* (MSC.1/Circ.1481).

3 AMENDMENTS TO THE INTERNATIONAL CONVENTION FOR SAFE CONTAINERS, 1972, AND ASSOCIATED CIRCULARS**GENERAL**

3.1 The Sub-Committee recalled that DSC 18, having noted the concerns expressed by several industry organizations on issues related to the development of ACEP database by BIC, had agreed, in general, that the pilot BIC database should be developed as a global ACEP database, taking into account that BIC members would bear the associated costs.

3.2 The Sub-Committee also recalled that DSC 18 had requested BIC to update CCC 1 on the progress made with the development of the global ACEP database and to explain how the linkage to GISIS should be arranged.

3.3 The Sub-Committee noted that MSC 93 had considered the outcome of DSC 18 and endorsed, in principle, the Sub-Committee's decision that the pilot BIC ACEP database should be developed as a global ACEP database.

DEVELOPMENT OF THE ACEP DATABASE

3.4 The Sub-Committee had the following documents for its consideration:

- .1 CCC 1/3 (BIC), providing an update on the ACEP database with answers regarding some questions on the validity and transparency of the data, the security of the database, the proposed link to GISIS and enhancements that have been implemented since DSC 18;
- .2 CCC 1/3/2 (BIC), proposing amendments to CSC.1/Circ.138/Rev.1 and CSC.1/Circ.143 so as to include a recommendation for CSC 1972 Contracting Parties to use the global ACEP database, hosted by BIC, to make their ACEP data publicly available; and
- .3 CCC 1/3/3 (ICS and WSC), expressing the concerns of the co-sponsors regarding the ACEP database, which include:
 - .1 how Administrations will be compelled to publish their ACEP data on the database and how failure to publish such information will be addressed by IMO;
 - .2 the responsibility of Administrations and the role of container operators or owners as to the accuracy of the data, the absence of set procedures for reporting errors in the data, and the possible impact of data inaccuracies on container operators; and
 - .3 the lack of a detailed breakdown of operating costs of the ACEP database.

3.5 In considering the above documents, the Sub-Committee noted that the implementation of a global ACEP database developed by BIC was a welcome development in making ACEP numbers publicly available and searchable. Nevertheless, the Sub-Committee also noted that the proposal by BIC to amend CSC.1/Circ.138/Rev.1 and

CSC.1/Circ.143 so as to include a recommendation for CSC 1972 Contracting Parties to use the global ACEP database, hosted by BIC. However, the proposal was not supported due to outstanding unresolved issues and questions regarding, inter alia, validity, accuracy, retention and completeness of the data, in addition to the concerns outlined in document CCC 1/3/3.

3.6 In order to gain a better understanding of all the issues that would need to be addressed in order for a global ACEP database to be fully implemented and supported, the Sub-Committee decided to refer documents CCC 1/3, CCC 1/3/2 and CCC 1/3/3 to the Working Group on Container Safety for further consideration (see paragraph 3.9).

WITHDRAWAL OF APPROVAL OF CONTAINERS THAT APPEAR TO BE UNSAFE AND REMARKING OF CONTAINERS WITH REDUCED STACKING AND RACKING CAPABILITY

3.7 The Sub-Committee considered document CCC 1/3/1 (ICHCA), presenting an example of a modified container series that had been involved in several major failures, proposing detailed procedures for examination, reporting series design review and remedial action that could be followed by Administrations, authorized organizations and other parties involved in surveying or examining containers that appear to be unsafe, and setting out in the annex draft guidance for the review of approval of containers that appear to be unsafe.

3.8 While some delegations supported the above proposal, the Sub-Committee, having noted concerns on the draft guidance, particularly on paragraph 41 which states that any party can request a design examination, and that the above proposals went beyond the scope of this output encouraged interested Member States to contact ICHCA about co-sponsoring a proposal for a new unplanned output in accordance with the Committees' Guidelines.

3.9 In this context, the Sub-Committee noted with appreciation document CCC 1/INF.16 (ISO), containing an article in the annex clarifying that all containers built after the entry into force of CSC 1972, which have reduced stacking or racking values, should be marked in accordance with the relevant standards not later than 1 July 2015.

INSTRUCTIONS TO THE WORKING GROUP ON CONTAINER SAFETY

3.10 The Sub-Committee instructed the Working Group on Container Safety, established under agenda item 9 (see paragraph 9.9), taking into account the comments and decisions made in plenary, to:

- .1 if time permits, identify the issues regarding the development of an ACEP database, taking into account documents CCC 1/3, CCC 1/3/2 and CCC 1/3/3, and advise the Sub-Committee accordingly;
- .2 consider the best way forward on the development of the ACEP database and advise the Sub-Committee accordingly;

REPORT OF THE WORKING GROUP ON CONTAINER SAFETY

3.11 Having considered the part of the report of the Working Group on Container Safety (CCC 1/WP.5) dealing with the agenda item, the Sub-Committee took action as outlined hereunder.

[to be prepared by the Secretariat in consultation with the Chairman after the session, based on the group's report and the actions requested therein, taking into account the decisions taken by the Sub-Committee during subsequent discussions]

4 DEVELOPMENT OF INTERNATIONAL CODE OF SAFETY FOR SHIPS USING GASES OR OTHER LOW-FLASHPOINT FUELS

GENERAL

4.1 The Sub-Committee recalled that BLG 17 had re-established the IGF Correspondence Group to finalize the remaining parts of the draft IGF Code and the related draft SOLAS amendments, based on the decisions made at BLG 17 and taking into account the IGF Working Group's reports (BLG 17/WP.5 and Add.1), and consider further development of the proposals for low-flashpoint oil and methyl/ethyl alcohol.

REPORT (PART 2) OF THE WORKING GROUP ESTABLISHED AT BLG 17

4.2 The Sub-Committee considered part 2 of the report of the IGF Working Group established at BLG 17 (BLG 17/WP.5/Add.1) and, having approved it in general, noted that the group's report had been further considered in detail by the correspondence group established at BLG 17 (see paragraph 4.3).

REPORT OF THE CORRESPONDENCE GROUP AND RELATED SUBMISSIONS

4.3 The Sub-Committee considered the report of the correspondence group (CCC 1/4), which contained the draft IGF Code and the related draft amendments to SOLAS, identifying remaining issues in parts A-1, B and C of the draft IGF Code to be further discussed. The

group also proposed a first draft of a possible part A-2 of the draft IGF Code with requirements for ships using methyl or ethyl alcohol as fuel.

4.4 In considering the report in general, the Sub-Committee noted the view that, following the finalization of the draft IGF Code with regard to LNG, the focus and momentum should be maintained in developing guidelines and standards for the use of other alternative fuels, such as methyl/ethyl alcohol, which would help in further reducing the environmental impact of international shipping.

4.5 The Sub-Committee approved the report in general and decided to consider documents related to, or commenting on, the correspondence group's report, as outlined hereunder, before considering the actions requested by the correspondence group.

Draft amendments to SOLAS chapter II-1 and forms of certificates

4.6 The Sub-Committee had for its consideration document CCC 1/4/8 (Finland), proposing changes to the draft amendments of chapter II-2 of SOLAS, and attaching alternative proposals to the draft amendments to the form of safety certificate for passenger ship, the form of safety certificate for cargo ship and the form of safety construction certificate for cargo ship, as well as a proposal for amending the form of safety equipment certificate for cargo ship.

4.7 In considering the above document, the Sub-Committee noted the following views expressed on the draft SOLAS amendments and the alternatives proposed:

- .1 the use of LNG as fuel ought to be considered as an alternative arrangement under regulation 4.1 of MARPOL Annex VI and, therefore, in addition to the certificates under SOLAS, the use of LNG should be noted under sections 2.3.1.2, 2.3.2.2 and 2.6 of the supplement to the International Air Pollution Prevention (IAPP) Certificate;
- .2 the proposed SOLAS amendments should be drafted so as not to exclude potential alternative fuels, whilst at the same time ensuring that fuels that have specific provisions within the IGF Code can be clearly deduced;

- .3 the proposed SOLAS amendments should be considered carefully in order to avoid placing obligations on existing ships built prior to the entry into force date of the IGF Code (i.e. grandfathering provisions should be appropriately addressed); and
- .4 having portable fuel tanks does not necessarily ensure compliance with the IGF Code;

4.8 Having considered the above views, the Sub-Committee decided to refer document CCC 1/4/8 to the working group for further consideration, taking into account the need to also develop proposed amendments to MARPOL and SOLAS certificates, as appropriate,

Definition of low-flashpoint fuels and draft amendments to SOLAS chapter II-2 regarding the application of the draft IGF Code

4.9 The Sub-Committee had the following documents for its consideration:

- .1 CCC 1/4/10 (Japan), proposing that:
 - .1 in addition to new ships, the three-date application criteria should be applied to existing ships that have undergone major conversion or major modification of their engines to use low-flashpoint fuel;
 - .2 the term "all ships" should not be used in the application provision for new ships;
 - .3 a clarification was required with regard to the application of the IGF Code to ships of less than 500 gross tonnage; and
 - .4 the wording of the draft amendments to SOLAS with regard to exclusion of ships covered by chapter 16 of the IGC Code, as developed by the correspondence group, be made more precise; and
- .2 CCC 1/4/13 (United States), proposing that "low-flashpoint fuels" should be defined in SOLAS chapter II-1 to provide further clarity regarding applicability, and attaching proposed amendments to draft new SOLAS

regulation II-1/56.1 to clarify the type of ships to which the IGF Code would apply and allow for the exceptions of SOLAS regulation I/3 to apply.

4.10 In considering the above documents, the Sub-Committee considered each of the issues individually in the order presented below.

Application to ships of less than 500 gross tonnage

4.11 With regard to the application of the IGF Code, the Sub-Committee agreed that SOLAS chapter II-1 (part G) and the IGF Code should not apply to cargo ships of less than 500 gross tonnage, noting that the provisions of the draft IGF Code could be applied to such ships on a voluntary basis based on national legislation.

General definition of low-flashpoint fuels

4.12 In considering the option of introducing a general definition of low-flashpoint fuels, the Sub-Committee agreed that a definition should be developed and referred this matter to the working group for further consideration.

"Three-date" application criteria

4.13 With regard to the "three-date" application criteria for existing ships that have undergone major conversion or have had their engines modified to use gas or low-flashpoint fuel, the Sub-Committee, having noted that most delegations were generally satisfied with the text developed by the correspondence group, establishing "three-date" application criteria for newly constructed ships and a "single-date" criterion for ships that have undergone major conversion and ships that have had their engines modified to use gas or low-flashpoint fuels, agreed to refer this matter to the working group for further consideration, with a view to avoiding any potential gaps in the application of the draft IGF Code.

Ships covered by the IGC Code

4.14 With regard to the exclusion of ships covered by chapter 16 of the IGC Code, the Sub-Committee agreed that the IGF Code should not apply to gas carriers covered by chapter 16 of IGC Code that do not use any other gas or low-flashpoint fuel, apart from vapour or boil-off from their cargo.

Draft IGF Code

Outcomes of SDC 1, HTW 1, SSE 1 and MSC 93 related to the draft IGF Code

4.15 The Sub-Committee noted the outcome of SDC 1, HTW 1, SSE 1 and MSC 93 relevant to this agenda item, as reported in documents CCC 1/2 and CCC 1/2/1 (Secretariat), and took them into account in its deliberations.

Operational venting

4.16 In considering document CCC 1/4/1 (Marshall Islands and Norway), highlighting the need for further consideration of restrictions on incidental operational venting and, in this respect, proposing an editorial amendment to chapter 3 or chapter 18 of the draft IGF Code, the Sub-Committee decided to refer the document to the working group for further discussion, having noted general support for the proposal.

Entrance arrangements of tank connection space, weld joint design of insulated tanks, and fire protection of the bunkering station

4.17 The Sub-Committee considered documents CCC 1/4/3 and CCC 1/INF.18 (China), presenting the results of an analysis on an LNG pool fire in a drip tray and proposing amendments to the draft IGF Code; specifically to paragraphs 5.11.3 with regard to regulations for arrangement of entrances and other openings, 6.4.14.1.2.1 with regard to weld joint design of vacuum insulated tanks, 11.3.7 with regard to fire protection of the bunkering station, 15.2.1.4 and 15.2.1.6 with regard to independence of the safety control system, and 12.5.2.1.9 with regard to hazardous area zone of fuel containment system for type C tanks.

4.18 In considering the above documents, the Sub-Committee referred the matters to the working group for further consideration, having noted the concerns and reservations expressed by some delegations regarding the proposals for the self-closing air-tight door, fire protection of the bunkering station and the degree of independence of the safety control system.

Enhanced safety machinery space

4.19 In considering document CCC 1/4/4 (China), introducing the concept of enhanced safety machinery space to address the situation of small machinery spaces in certain ships and, in this regard, proposing draft text to be included in section 5 of the draft IGF Code, the Sub-Committee, having recalled its previous decision that the IGF Code would not apply to

cargo ships of less than 500 gross tonnage, agreed that no further consideration was required, since the proposal by China was intended for small ships of less than 500 gross tonnage. Consequently, the Sub-Committee decided not to refer this matter to the working group.

Welding type and arrangement of tank connection

4.20 In considering document CCC 1/4/5 (China), proposing amendments to paragraphs 6.4.14.1.2.1 and 9.3.3 of the draft IGF Code regarding welding type and arrangement of tank connection, respectively, and also proposing the introduction of a new paragraph 9.6.3 regarding the fuel gas supply pipe, the Sub-Committee, having noted that the proposals were highly technical in nature, referred document CCC 1/4/5 to the working group for further consideration.

Proposals for the unresolved issues identified by the correspondence group

4.21 The Sub-Committee considered document CCC 1/4/6 (Norway), presenting the preferences of Norway for all the issues remaining in the draft IGF Code as identified by the correspondence group and set out in annex 2 to document CCC 1/4, and proposing, inter alia, that the draft definition for unacceptable loss of power should be included in the IGF Code and used consistently in paragraphs referring to compromises in power generation, and referred the document to the working group for further consideration

Rollover conditions

4.22 The Sub-Committee considered document CCC 1/4/9 (Japan), proposing draft text for a new paragraph 6.4.2.7 in the draft IGF Code, introducing equipment and measures to avoid stratification and the possible consequent development of rollover conditions, and also suggesting that the conditions for development of rollover be further considered.

4.23 Following discussion, the Sub-Committee, having noted that the issue of rollover had been discussed in previous meetings of the BLG Sub-Committee but had not been included in the draft Code, nevertheless agreed to refer the matter to the working group, as presented by Japan with updated information and proposals, for further consideration and technical discussion.

Natural gas specifications and definition of gas consumer

4.24 In considering document CCC 1/4/11 (EUROMOT), proposing the incorporation of a natural gas specification and a more specific definition for gas consumer in the draft IGF Code, the Sub-Committee noted that it did not receive sufficient support.

4.25 In this context, the observer from ICS, referring to the the Sub-Committee's earlier consideration on the need to more clearly define what is meant, for example, by the potential risk of "significant" loss of power when using LNG as a fuel (see paragraph 4.21) and noting that there have been a number of references to the variability of both the composition and energy content of LNG, expressed the view that further careful consideration would be necessary on this matter.

Hold space as cofferdam, fuel cells and low-flashpoint diesel

4.26 The Sub-Committee considered document CCC 1/4/12 (CESA), proposing:

- .1 the re-introduction of the sentence "For type C tanks, the hold space may be considered as a cofferdam", as developed by FP 56, in paragraphs 5.3.1 and 11.3.4 of the draft IGF Code, and that consideration be given as to whether a similar clarification should be added with regard to (spherical and prismatic) independent type A and B tanks;
- .2 the finalization of the requirements for fuel cells at this session and their inclusion in the draft IGF Code with a view to approval by MSC 94;
- .3 the exclusion of low-flashpoint diesel fuels from the scope of the IGF Code unless specific requirements for such fuels, based on the draft requirements set out in the annex to the document, are included in the draft Code; and
- .4 a two-year extension of the target completion date for this output in order to allow time for the finalization of requirements for fuel types and energy converters that could not be finalized at this session.

4.27 Regarding the hold space being considered as a cofferdam for type C tanks, the Sub-Committee noted that this was an unintended omission by the correspondence group and agreed to reinstate the sentence in paragraphs 5.3.1 and 11.3.4 of the draft Code.

4.28 On the subject of fuel cells, the majority of those who spoke expressed the view that the provisions for fuel cells required further development and consideration. In view of the need to finalize the draft IGF Code with regard to LNG at this session, the Sub-Committee decided to instruct the working group to consider the draft fuel cell section of the Code only if time permits.

4.29 The Sub-Committee recalled its previous decision that a general definition for low-flashpoint fuels should be developed and noted that such a definition was linked with whether the IGF Code would include low-flashpoint diesel within its scope. Therefore, the Sub-Committee decided that the inclusion of specific requirements for low-flashpoint diesel within the Code should be reconsidered at a later stage as a potential amendment of the IGF Code, taking into account that a related proposal has been submitted to MSC 94.

Application of the IGF Code to large deep sea ships

4.30 The Sub-Committee noted the information in document CCC 1/INF.24 (Malta and Marshall Islands), providing information on how LNG may be utilized in practice to safely and efficiently propel ships and highlighting the implications of the requirements for tank location and separation for large deep sea ships, as well as the urgent need to fully implement the IGF Code, and referred the document to the working group for information purposes.

Leak and gas explosion analyses for LNG-fuelled ships

4.31 The Sub-Committee noted the information in document CCC 1/INF.25 (Republic of Korea), providing information on the results of leak and gas explosion analyses of an LNG-fuelled ship, and referred the document to the working group for information purposes.

Actions requested by the correspondence group

4.32 Having considered the above issues, the Sub-Committee considered the actions requested by the correspondence group, as set out in paragraph 22 of document CCC 1/4, and in particular:

- .1 noted the progress on the development of the draft IGF Code and, in particular the discussion on fuel cells. In this regard the Sub-Committee recalled the relevant discussions and decisions regarding fuel cells (see paragraph 4.28) and reiterated the need to finalize all other requirements of LNG at first instance.

- .2 agreed, in general, to the draft SOLAS amendments and in particular:
 - .1 endorsed the principles agreed on application, specifically that the IGF Code should apply to new ships and existing ships converting from the use of conventional oil fuel to the use of low-flashpoint fuel on or after the date of entry into force of the Code, and that the IGF Code should not apply to ships certified for the use of low-flashpoint fuels based on national standards prior to the entry into force of the IGF Code;

 - .2 regarding the possible exclusion of ships complying with the IGC Code from the application of the IGF Code, recalled its decision that the IGF Code should not apply to gas carriers complying with the requirements of chapter 16 the IGC Code (see paragraph 4.14);

 - .3 regarding the possible inclusion of ships of less than 500 gross tonnage, recalled its decision that the IGF Code should not apply to cargo ships of less than 500 gross tonnage (see paragraph 4.11);

 - .4 regarding the two options for SOLAS regulation II-2/4.2.1, having recalled relevant discussion and decisions on low-flashpoint fuels (see paragraphs 4.12 and 4.13), referred the two options to the working group for further detailed consideration, having noted that:
 - .1 careful drafting was required in order to make sure that the scope of the IGF Code was not extended to cargo ships of less than 500 gross tonnage, in line with the Sub-Committee's previous decision, and that no ambiguity was introduced as to the requirement for a detailed risk

assessment as part of alternative design procedures for low-flashpoint fuels for which specific provisions had not been developed yet; and

- .2 the general definition of low-flashpoint fuels would clarify whether low-flashpoint diesel fuel within the scope of the IGF Code, thus aiding the decision on whether specific requirements could be included at a later stage;
- .3 endorsed the group's view that the IGF Code, in its first phase, should not contain specific requirements for ships using ethyl/methyl alcohol as fuel; and
- .4 regarding the development of measures for ships using ethyl/methyl alcohol as fuel, noted the discussions reported by the group and decided, in principle, on a two-step approach on these ships, with guidelines developed as a first step, followed by specific requirements to be incorporated in the IGF Code as a second step, pending the development of a work plan for the next stage of development of the IGF Code by the working group.

LOCATION OF FUEL TANKS

4.33 The Sub-Committee recalled that document MSC 93/21/3 (France), proposing an interpretation for minimum distance criteria for fuel tanks, to be applied at the turn of the bilge area between the side and the bottom shell, had been referred by MSC 93 to CCC 1 for consideration, with a view to finalization.

4.34 The Sub-Committee considered document MSC 93/21/3 (France) and decided to refer the document to the working group for further consideration.

4.35 Regarding location of fuel tanks, the Sub-Committee also had for its consideration the following documents:

- .1 CCC 1/4/2 (Bahamas et al.), commenting on the probabilistic calculation method in setting the location of LNG fuel tanks, which is reflected in section 5.3 of the draft IGF Code and proposing that the probabilistic calculation method is not included in the IGF Code;

- .2 CCC 1/4/7 (Norway), providing comments on the discussions at SDC 1 related to the requirements for the location of fuel tanks in the draft IGF Code and proposing amendments to the text of the draft IGF Code developed at SDC 1; and
- .3 CCC 1/INF.20 (Norway), presenting the results of assessments of the additional risk for a gas fuelled RoPax compared to a conventional oil fuelled RoPax due to the probability for the LNG fuel tank to be penetrated in a collision, and the consequences of such a penetration.

4.36 In this context, Sub-Committee recalled the decision of SDC 1 to forward the two options on the threshold values for the length of the fuel tanks and The factor f_{cn} , which accounts for collision damages that may occur within a zone limited by the longitudinal projected boundaries of the fuel tank, to MSC 94 for decision, which was endorsed by MSC 93.

4.37 The Sub-Committee also recalled that document MSC 93/21/4 (France), containing proposals related to the location of fuel tanks, specifically putting forward f_{cn} values for passenger and cargo ships, had been referred by MSC 93 to MSC 94 and not to CCC 1.

4.38 After preliminary discussion on the above documents and following the decision of MSC 93, the Sub-Committee forwarded all documents submitted to this session containing proposals and information on the location of fuel tanks, namely documents CCC 1/4/2 (Bahamas et al.), CCC 1/4/7 (Norway) and CCC 1/INF.20 (Norway), to MSC 94 for consideration and action, as appropriate.

4.39 Regarding submissions to MSC 94, the Sub-Committee noted that the final day of CCC 1 coincided with the deadline for submission of non-bulky documents to MSC 94. The Sub-Committee was advised that the Secretariat had consulted the Chairman of MSC 94 who had approved a two week extension for the deadline of non-bulky and commenting documents to be submitted under the MSC 94 agenda item on the outcome of CCC 1 for urgent items (i.e. 26 September 2014 and 10 October 2014, respectively).

ESTABLISHMENT OF THE WORKING GROUP

4.40 The Sub-Committee established the Working Group on Development of the international code of safety for ships using gases or other low-flashpoint fuels (IGF Code) and instructed it, based on the correspondence group's report (CCC 1/4), taking into account documents CCC 1/4/1, CCC 1/4/3, CCC 1/4/5, CCC 1/4/6, CCC 1/4/8, CCC 1/4/9, CCC 1/4/10, CCC 1/4/12, CCC 1/4/13, MSC 93/21/3, CCC 1/INF.18, CCC 1/INF.24 and CCC 1/INF.25, as well as the outcomes of SDC 1, HTW 1, SSE 1 and MSC 93 (CCC 1/2 and CCC 1/2/1) and the comments and decisions made in plenary, to:

- .1 finalize the draft International Code of safety for ships using gases or other low-flashpoint fuels (IGF Code), focusing on remaining parts identified in document CCC 1/4 (paragraph 8 and annex 2);
- .2 finalize the draft SOLAS amendments to make the Code mandatory, taking into account MSC.1/Circ.1483 on a trial basis;
- .3 develop a work plan for the next phase in the development of the IGF Code;
- .4 decide whether the correspondence group should be re-established for facilitating the next phase in the development of the IGF Code and, if so, prepare terms of reference for consideration by the Sub-Committee; and
- .5 submit a written report by Thursday, 11 September 2014.

Report of the working group

4.41 Having received the report of the working group (CCC 1/WP.3), the Sub-Committee approved it in general and took action as outlined hereunder.

[to be prepared by the Secretariat in consultation with the Chairman after the session, based on the group's report and the actions requested therein, taking into account the decisions taken by the Sub-Committee during subsequent discussions]

5 AMENDMENTS TO THE IMSBC CODE AND SUPPLEMENTS

GENERAL

5.1 The Sub-Committee recalled that DSC 18 had instructed E&T 21 to prepare the draft amendments (03-15) to the IMSBC Code, and noted that E&T 22 (15 to 19 September 2014) will be instructed to finalize the draft amendment 03-15 to the IMSBC Code, for circulation with a view to adoption by MSC 95.

5.2 The Sub-Committee also recalled that DSC 18 had established the Correspondence Group on Substances Harmful to the Marine Environment (HME Substances) within the IMSBC Code in relation to the revised MARPOL Annex V and instructed the group to report to CCC 1.

REPORT OF E&T 21

5.3 The Sub-Committee considered the report of E&T 21 (CCC 1/5), together with the related documents submitted to the session and, having approved it in general, took the following actions:

- .1 noted the discussions and deliberations of the group in order to establish a notational listing system for identifying MHB cargoes;
- .2 having considered the two options of the draft notational listing system to be incorporated in the draft amendments (03-15) of the IMSBC Code (CCC 1/5, paragraphs 2.8 and 2.9 and annex 2), together with document CCC 1/5/17 (Belgium and the Netherlands), commenting that the term "Hazards not otherwise specified (n.o.s.)" should be replaced with "other hazards (O.H.)", agreed that option 3, as proposed in document CCC 1/5/17, provided the best solution for the establishment of a notational listing system for identifying MHB cargoes, and referred this matter for further consideration of the E&T group;
- .3 noted the opinion of the group that, in order to assess and assign an MHB category to future proposed schedules, MSC.1/Circ.1453 should be amended, and agreed to request the E&T group to consider this matter and advise the Sub-Committee;

- .4 noted the discussions and comments of the group on the progress report of the correspondence group on provisions for substances harmful to the marine environment (HME);
- .5 noted the action taken by the group in relation to the inclusion of the new schedule for IRON ORE FINES and the amendments to the existing schedule of IRON ORE and appendix 2 in the draft amendments (03-15) of the Code;
- .6 in regard to cargoes that may liquefy, agreed to the draft amendments to section 7 of the Code and the individual schedule for CLINKER ASH, together with some consequential amendments to section 8 and appendix 1;
- .7 agreed to the consequential amendment to paragraph 1.3 of MSC.1/Circ.1454 on Guidelines for developing and approving procedures for sampling, testing and controlling the moisture content for solid bulk cargoes which may liquefy, as prepared by the group;
- .8 having noted the views of the group that the definition for group A cargo does not encompass accidental wetting of a cargo and does not cover circumstances where a cargo could liquefy if wet, agreed that it could be improved in future;
- .9 agreed to the consequential amendment to MSC.1/Circ.1395/Rev.1 on Lists of solid bulk cargoes for which a fixed gas fire-extinguishing system may be exempted or for which a fixed gas fire-extinguishing system is ineffective, as identified by the group;
- .10 having noted the discussions and deliberations of the group regarding the references to related information and recommendations on technical requirements and international standards contained in the IMSBC Code, agreed to the draft amendments to section 13 of the Code;

- .11 having noted the discussions of the group regarding fire safety in conveyor belt spaces on self-unloading bulk carriers, in particular, on the verification and implementation of the new draft provision, agreed to the draft amendment to section 3 "Safety of personnel and ship", as prepared by the group;
- .12 having noted the actions taken by the group with regard to draft amendment 03-15, considered documents:
- .1 CCC 1/5/18 (Venezuela), containing information on the progress made in establishing the best methods for ensuring safe carriage of Direct Reduced Iron (D) and, having noted a concern that further information on test results is necessary, and taking into account the potential reaction of the cargo (Reduced Iron (D)) during transport, decided not to forward the document to the E&T 22; and
 - .2 CCC 1/5/21 (Japan), commenting on the text contained before description section in the draft schedule for IRON AND STEEL SLAG AND ITS MIXTURE (CCC 1/5, paragraphs 5.18 to 5.22), and agreed, in principle, with the proposal, noting the need to carefully define "hazards to human health" and make reference to it in that individual schedule, and forwarded the document to the E&T 22 for further consideration.
- .13 considered a draft new appendix to the IMSBC Code (CCC 1/5/19), containing the bulk cargo shipping names in three languages (English, French and Spanish), and agreed to refer this document to E&T 22 for further consideration and inclusion in the draft amendment 03-15; and
- .14 in regard to the inconsistencies for seed cake entries, considered document CCC 1/5/2 (Germany and Italy), proposing to amend such inconsistencies in the index (appendix 4) of the IMSBC Code, and agreed to refer this document to E&T 22 for further consideration.

5.4 In considering the draft new individual schedule for MANGANESE ORE FINES (CCC 1/5, paragraphs 5.49 to 5.53), the delegation of the Cook Islands expressed concern that, despite the late posting of the submissions (less than three weeks), E&T 21 had still considered and agreed to include the draft new individual schedule proposed by Australia (E&T 21/5/11, E&T 21/INF.4 and E&T 21/INF.5) even though the delegation of Brazil had expressed legitimate concerns at the meeting over the proposed new individual schedule. They further stated that, as a broader issue, the E&T Group and the ESPH Working Group should not consider new proposals without instructions from the parent Sub-Committees, and that these expert groups should also be governed by the Committees' Guidelines (MSC-MEPC.1/Circ.4/Rev.2), stressing that submission deadlines for such groups should be more than five weeks. This view was supported by several delegations.

5.5 In commenting on the above view, and in order to reduce the burden for delegations to participate in the E&T Group, the delegation of Spain proposed to abolish the spring session of the E&T Group and, instead, establish a working group during the Sub-Committee session so that such a working group would be entitled to discuss the new proposals submitted to the Sub-Committee only. However, this proposal was not supported by most delegations mainly due to the fact that such an arrangement would decrease the time for considering the substance matters in detail, since the time for discussion would be reduced from 5 days to 2 or 3 days.

5.6 The delegation of Belgium pointed out that the E&T Groups (both on IMDG and IMSBC amendments) have worked only for the benefit of the Sub-Committee based the long-established practices, i.e. a spring session prepares draft amendments to the IMDG or IMSBC Codes, a full detailed report is submitted to the Sub-Committee for consideration 13 weeks in advance of the forthcoming session, the Sub-Committee considers the report and instructs the autumn session of the E&T Group to finalize the draft amendments, for circulation to the MSC with a view to adoption. The delegation suggested continuing with current practice and this was supported by several delegations.

5.7 In this regard, the Sub-Committee noted that the submission deadlines for E&T 21 are normally set six or seven weeks prior to the meeting (E&T 21/1 and Circular Letter No.3424), taking into account the Committees' Guidelines and the delayed issuance of the UN TDG Sub-Committee's report. However, it was found that the actual posting of the documents on IMODOCS was late, about three to four weeks before E&T 21. The Sub-Committee also noted that the report of E&T 21 was submitted to the

Sub-Committee before the first submission deadline (13 weeks) and was posted 12 weeks before CCC 1.

5.8 After lengthy discussion, the Sub-Committee, bearing in mind the importance of keeping the efficiency of the current practice of utilizing the E&T Group and in order to improve the transparency of the group, decided that the report of the E&T Group on draft amendments to the IMDG or IMSBC Code should be separated into two parts, i.e. one part related to proposals which have been submitted and discussed by the Sub-Committee and another part related to new proposals submitted directly to the group. Regarding possible changes of the current practice on method of work for the E&T Group, the Sub-Committee, taking into account the difficulty in considering the matter further without written proposals, invited Member Governments to submit documents to the Committees for their consideration, bearing in mind that document submission dates and meeting arrangements fall under the purview of the Committees and the Council.

5.9 MSC 94 and MEPC 68 were invited to note the above discussion.

REPORT OF THE CORRESPONDENCE GROUP ON HME SUBSTANCES

5.10 The Sub-Committee considered the report of the Correspondence Group on HME substances (CCC 1/5/1, CCC 1/INF.4, CCC 1/INF.5, E&T 21/INF.2 and 3), together with the related documents submitted to the session and, having approved the report in general, took action as indicated hereunder.

New section 14 of the IMSBC Code

5.11 With regard to the draft new section 14 of the IMSBC Code, the Sub-Committee, whilst noting the informative nature of the new section, noted reservations on the need to include in the Code such new section 14, mainly because it only reproduces relevant parts of MARPOL Annex V and the *2012 Guidelines for the Implementation of MARPOL Annex V*. In considering how best to proceed, the Sub-Committee decided to establish a working group (see paragraph 5.34) to finalize the draft new informative section 14 of the Code, with square brackets around the whole section, based on the correspondence group's report, for submission to MEPC 68 for advice.

Requirements for cargo information in the Code (subsection 4.2)

5.12 Regarding incorporation of new requirements for cargo information on "HME" or "non-HME" in the IMSBC Code (subsection 4.2), the Sub-Committee considered document CCC 1/5/20 (Japan), highlighting an inconsistency between SOLAS, the IMSBC Code and the *2012 Guidelines for the Implementation of MARPOL Annex V*, with regard to the different requirements for the shipper to declare HME or non-HME substances, and proposing not to include new requirements on cargo information into the draft amendment 03-15 of the Code.

5.13 While some delegations supported the above proposal, the Sub-Committee, taking into account the benefit of including such requirements for cargo information on HME substances in the Code as non-mandatory, agreed to instruct the working group to prepare new non-mandatory requirements for cargo information on HME substances as a part of draft amendments to the Code, together with relevant amendments to paragraph 1.4.2 of the Code to clarify their recommendatory nature, based on the correspondence group's report, for submission to MEPC 68 for advice.

Indicative lists

5.14 The Sub-Committee considered draft indicative lists of solid bulk cargoes with regard to HME prepared by the correspondence group (i.e. a draft MEPC circular and candidates cargoes in the black indicative list, consisting of cargoes which are liable to be classified as HME; and a white indicative list, consisting of cargoes which may be classified as non-HME), together with the following related documents:

- .1 CCC 1/5/15 (Chile and Peru), proposing a process that could be followed in order to efficiently develop those indicative HME and non-HME lists under MARPOL Annex V, which ensures that the most relevant and high-quality data is identified and reviewed, so that the listing of a cargo would reflect its relevant characteristics; and
- .2 CCC 1/5/22 (Brazil), providing general comments on the UN (GHS) analytical method (resolution MEPC 219(63)) for HME final classification that could lead to the allocation of non-hazardous substances on the black list, proposed in document CCC 1/5/1, and suggesting an alternative methodology to assess ecotoxicological of mineral/metal ores and concentrates, based on UN GHS criteria 1 and 2, prior to including any candidate cargo to the HME black list.

5.15 While some delegations supported the development of indicative lists of HME substances, the majority of those who spoke expressed concerns regarding the practical value such indicative lists and the difficulty in developing them. After lengthy discussion, the Sub-Committee agreed not to prepare any indicative lists at this stage, with a view to seeking the advice of MEPC 68.

Draft amendments to the IMSBC Code related to HME substances

5.16 In considering how to proceed in light of the above discussion, the Sub-Committee agreed that two sets of draft amendments to the IMSBC Code shall be prepared, i.e. draft amendments (03-15) to the IMSBC Code, excluding the matters related to HME substances, to be finalized by E&T 22, for submission to MSC 95 with a view to adoption; and a separate set of draft amendments to the IMSBC Code related to HME substances, to be prepared by the working group, for submission to MEPC 68 for advice and for submission to MSC 95 with a view to adoption, if appropriate, taking into account the outcome of MEPC 68.

5.17 With regard to draft amendments to the IMSBC Code related to HME substances, the Sub-Committee, having recognized the non-mandatory nature of the amendments as a short-term solution, agreed to instruct the working group to further consider how the long-term implementation of provisions of MARPOL Annex V concerning cargo residues can be facilitated.

PROVISIONS FOR SOLID BULK CARGOES WHICH MAY LIQUEFY

New Caledonian nickel ores

5.18 The Sub-Committee noted document CCC 1/5/5 (France), presenting a progress report on the Rheolat 2 project to optimize a VTPB (Vibration Table with Penetration Bit) transportability test for New Caledonian nickel ores.

Manganese ore fines

5.19 Having considered document CCC 1/5/7 (Brazil), proposing to amend the MANGANESE ORE FINES individual schedule by including an explanatory text under the "Bulk Cargo Shipping Name", the Sub-Committee agreed, in principle, to the proposal and referred this document to E&T 22 for inclusion in draft amendment 03-15 of the Code.

Australian Coal Industry Liquefaction Research Project

5.20 The Sub-Committee noted document CCC 1/5/8 (Australia), providing interim information regarding an ongoing coal liquefaction research project being undertaken in Australia that has been designed to develop fundamental understandings of coal cargo stability during shipping, including the potential for cargo liquefaction, and to use this knowledge to determine how best to assess the behaviour of coal cargoes during shipping.

Iron ores

5.21 The Sub-Committee noted document CCC 1/INF.19 (Brazil), providing information concerning the existing procedures already adopted by the Brazilian iron ore mining industry regarding moisture control, sampling and testing of group A cargoes, and also noted that the procedures have already followed the requirement of paragraph 4.4.4, as adopted by resolution MSC.354(92).

PROPOSALS FOR INDIVIDUAL SCHEDULES IN THE IMSBC CODE

Oily vegetables and their processing by-products

5.22 The Sub-Committee considered documents CCC 1/5/3 and CCC 1/INF.6 (Germany and Italy), proposing a new individual schedule for:

- .1 oily vegetables and their processing by-products as an MHB cargo to substitute existing entries for schedules of SEED CAKE; and
- .2 oily vegetables and their processing by-products as dangerous good in order to substitute the existing entries for schedules of SEED CAKE, UN 1386 and SEED CAKE, UN 2217.

5.23 The Sub-Committee, having noted that the above schedules are part of a broader proposal aiming to reform all the entries for packaged and bulk transport of oily vegetables and their processing by-products and further noted that the co-sponsors intend to request to the UN Sub-Committee on TDG, a new name for Dangerous Goods classified presently under SEED CAKE, UN 1386 and SEED CAKE, UN 2217, referred the documents to E&T 22 for further consideration.

Oily vegetables and their processing by-products (non-hazardous)

5.24 The Sub-Committee considered document CCC 1/5/4 (Germany and Italy), proposing a new individual schedule for Oily vegetables and their processing by-products as (non-hazardous) cargo.

5.25 The Sub-Committee also considered document CCC 1/5/16 (China), highlighting that a number of currently shipped seed cakes and other similar vegetable products are not listed in the IMSBC Code, and that, in China, the acceptability of the above-mentioned cargoes is assessed as per the requirements of section 1.3 of IMSBC Code before the shipment of such cargoes. China proposed to adopt "oily vegetables and their processing by-products (non-hazardous)" as BSCN and to add "The oil contained in the cargoes to which this entry is applicable exists in the form of fat" at the end of the paragraphs under the BCSN.

5.26 Having considered the above documents, the Sub-Committee decided to refer them to E&T 22 for further consideration.

Amorphous sodium silicate lumps

5.27 The Sub-Committee considered documents CCC 1/5/6 and CCC 1/INF.7 (Italy), proposing a new individual schedule for amorphous sodium silicate lumps in bulk and providing a comprehensive review on the properties of soluble silicates that could be useful as technical support for this proposal, and decided to refer them to E&T 22 for further consideration, with a view to inclusion in the draft amendments (03-15) to the IMSBC Code.

Spodumene (Upgraded) Group A

5.28 In considering documents CCC 1/5/9, CCC 1/INF.10 and CCC 1/INF.11 (Australia), proposing a new individual schedule for Spodumene (Upgraded) group A, and providing the solid bulk cargo information reporting questionnaire, MSDS, certificate of transportable moisture limit (TML) and other technical tests results of the product, the Sub-Committee decided to refer them to E&T 22 for further consideration, with a view to inclusion in the draft amendments (03-15) to the IMSBC Code.

Iron oxide technical

5.29 The Sub-Committee considered documents CCC 1/5/12, CCC 1/INF.21 (Germany and Sweden), proposing a new individual schedule for Iron oxide technical and the supporting technical documentation, and having noted general support for the proposals

decided to refer them to E&T 22 for further consideration, with a view to inclusion in the draft amendments (03-15) to the IMSBC Code.

Zircon kyanite concentrate

5.30 The Sub-Committee considered documents CCC 1/5/10, CCC 1/INF.12 and CCC 1/INF.13 (Australia), proposing a new individual schedule for Zircon kyanite concentrate and providing the solid bulk cargo information reporting questionnaire, MSDS, certificate of transportable moisture limit (TML) and other technical tests results of the product, and decided to refer them to E&T 22 for further consideration, with a view to inclusion in the draft amendments (03-15) to the IMSBC Code.

Iron silicate slag

5.31 The Sub-Committee considered documents CCC 1/5/13 and CCC 1/INF.17 (Germany), proposing a new individual schedule for Iron oxide technical and providing additional information on the technical properties of the product, and decided to refer them to E&T 22 for further consideration.

Metal Sulphide Concentrates UN 1759

5.32 The Sub-Committee considered documents CCC 1/5/11, CCC 1/INF.14 and CCC 1/INF.15 (Australia), proposing a new individual schedule for Metal Sulphide Concentrates UN 1759 (group A and B) and providing the solid bulk cargo information reporting questionnaire, MSDS and other technical tests results of the product, and decided to refer them to E&T 22 for further consideration.

Pig Iron by-products

5.33 The Sub-Committee considered documents CCC 1/5/14 and CCC 1/INF.22 (Germany), proposing a new individual schedule for Pig Iron by-products and the corresponding technical information of the product, and decided to refer them to E&T 22 for further consideration with a view to inclusion in the draft amendment (03-15) to the IMSBC Code.

ESTABLISHMENT OF THE WORKING GROUP

5.34 The Sub-Committee established the Working Group on Substances Harmful to the Marine Environment (HME Substances), taking into account documents CCC 1/5, CCC 1/5/1, CCC 1/5/15, CCC 1/5/20, CCC 1/5/22, CCC 1/INF.4, CCC 1/INF.5, E&T 21/INF.2 and E&T 21/INF.3 and the comments and decisions made in plenary, and instructed it to:

- .1 prepare the draft amendments to the IMSBC Code related to HME substances, including new section 14 of the Code, as well as the justification for non-mandatory cargo information requirements;
- .2 consider how the long-term implementation of provisions of MARPOL Annex V concerning cargo residues can be facilitated; and
- .3 submit a written report by Thursday, 11 September 2014.

[REPORT OF THE WORKING GROUP

5.35 Having considered the report of the working group (CCC 1/WP.[...]) on HME Substances, the Sub-Committee approved it in general and took action as indicated in the following paragraphs:

[to be prepared by the Secretariat in consultation with the Chairman after the session, based on the group's report and the actions requested therein, taking into account the decisions taken by the Sub-Committee during subsequent discussions]

DRAFT AMENDMENT 03-15 OF THE IMSBC CODE AND INSTRUCTIONS TO THE E&T GROUP

5.36 The Sub-Committee authorized E&T 22 to finalize the draft amendments (03-15) to the IMSBC Code, based on documents submitted to CCC 1 and taking into account comments made and decisions taken in plenary, excluding matters related to HME substances. The group was also instructed to identify and correct any editorial mistakes in amendment 02-13 of the Code and submit a written report to CCC 2.

5.37 Subsequently, the Sub-Committee requested the Secretary-General to circulate the draft amendments (03-15) to the IMSBC Code, to be prepared by E&T 22, and other draft amendments to the IMSBC Code related to HME substances, agreed at this session, in accordance with SOLAS article VIII for consideration with a view to adoption by MSC 95.]

6 AMENDMENTS TO THE IMDG CODE AND SUPPLEMENTS

GENERAL

6.1 The Sub-Committee recalled that amendments (36-12) to the IMDG Code, adopted by resolution MSC.328(90), had entered into force on 1 January 2014.

6.2 The Sub-Committee noted that MSC 93 had adopted amendments (37-14) to the Code by resolution MSC.372(93), which is envisaged to enter into force on 1 January 2016 and as a voluntary basis from 1 January 2015.

6.3 The Sub-Committee further recalled that DSC 18 had established a correspondence group on revision of DSC/Circ.12 on *Guidance on the continued use of existing IMO type portable tanks and road tank vehicles for the transport of dangerous goods*, and instructed the group to report to CCC 1.

6.4 The Sub-Committee noted that, after this session, E&T 23 (Spring 2015) would be instructed to prepare the draft text of amendments (38-16) to the IMDG Code, for consideration at CCC 2.

REPORT OF E&T 20

6.5 The Sub-Committee considered the report of E&T 20 (CCC 1/6), together with the related documents submitted to the session, and, having approved it in general, took action as set out hereunder:

Editorial corrections to the IMDG Code

6.6 The Sub-Committee noted that editorial corrections to the English and French versions of the IMDG Code amendment 36-12 (resolution MSC.328(90)) were issued as documents MSC 90/28/Add.2/Corr.3/Rev.1, MSC 90/28/Add.3/Corr.2/Rev.1 and MSC 90/28/Add.4/Corr.2, and also noted the action taken by the Secretariat to correct the footnote references in the electronic version of the IMDG Code, which are wrongly quoted as "Notes".

Replacement of the term "Marine Pollutant" or "Marine Pollutant/Environmentally Hazardous"

6.7 The Sub-Committee noted the deliberations of the group regarding the possible replacement of the term "Marine Pollutant" or "Marine Pollutant/Environmentally Hazardous"

and that interested delegations and international organizations were invited to submit proposals on this issue to the RID/ADR/ADN joint meeting.

Packing provisions on water-reactive materials

6.8 Having noted the draft amendments to packing provisions on water-reactive materials prepared by the group, the Sub-Committee referred these to E&T 23 for inclusion in the draft amendment 38-16 to the IMDG Code.

Transport provisions for UN 3166

6.9 With regard to transport provisions for UN 3166, the Sub-Committee noted the corresponding amendment to SP 962 in the Code and considered document CCC 1/6/12 (IACS), examining the application of the requirements of the IMDG Code and SOLAS chapter II-2 in relation to spaces carrying vehicles with fuel in their tanks, and maintaining that there is confusion and a potential conflict between the provisions of SOLAS and Special Provisions (SP) 961 and 962 that are associated with the transport of vehicles as dangerous goods. In order to address these issues, as requested by E&T 20, IACS developed and proposed a draft unified interpretation of the term "vehicle spaces" as provided in SOLAS regulation II-2/3.49, and invited the Sub-Committee to consider the following issues:

- .1 decide on the need for an amendment to SOLAS;
- .2 decide whether an interpretation can be used as an interim measure; and
- .3 agree on the text of an interpretation, taking into account the proposal given in paragraph 11 of the document.

6.10 In considering document CCC 1/6/12, the Sub-Committee noted the following views expressed on the matter:

- .1 the draft unified interpretation conflicts with requirements for the carriage of dangerous goods specified in SOLAS regulation II-2/19.2.1 and II-2/20;

- .2 the draft unified interpretation could affect the applications of requirements for fire integrity of bulkheads and decks specified in SOLAS regulation II-2/9; and
- .3 the provisions surrounding UN 3166 ENGINE, INTERNAL COMBUSTION or VEHICLE etc. have been discussed at the United Nations and it is expected that completely new provisions will be adopted at the United Nations meeting in December for harmonization with the Code in Spring 2015. The changes will feed down to IMO (E&T) to consider in line with the harmonization process.

6.11 The Sub-Committee generally agreed that in the long-term the best solution would be for SOLAS regulation II-2/19 to be amended, while a unified interpretation could potentially be applied as an interim measure.

6.12 In this context, the Sub-Committee agreed to refer document CCC 1/6/12 to E&T 23 for further consideration of the draft unified interpretation in relation to SP 961 and SP 962, taking into account discussions and comments made in plenary and the outcome of discussions at the United Nations level. Additionally, the Sub-Committee invited interested Member States and international organizations to submit proposals to MSC 95 on possible amendments to SOLAS.

Safety adviser

6.13 Regarding the concept of introducing the function of a safety adviser in the IMDG Code in the context of non-declared and misdeclared dangerous goods, the Sub-Committee noted the view of E&T 20 that an additional development of the existing training provisions in the IMDG Code may help to increase the level of compliance in this regard.

Special Provision to generic and "not otherwise specified" entries

6.14 The Sub-Committee noted the views of the group regarding a new special provision on marine pollutants applicable to certain substances, materials or articles and considered related document CCC 1/6/4 (Belgium), proposing to add a Special Provision (SP) to generic and "not otherwise specified" entries in order to indicate that the proper shipping name for marine pollutants needs to be supplemented with the recognized chemical name of the marine pollutant.

6.15 Having noted the preference of some delegations to discuss the matter at the United Nations level and the concern that the proposal by Belgium could lead to a reduction in the flexibility afforded by the current arrangement in the IMDG Code, the Sub-Committee decided to refer the matter to E&T 23 for further consideration only and not for inclusion in the next draft amendments of the IMDG Code.

Recommendations to the correspondence group on the revision of DSC/Circ.12

6.16 The Sub-Committee noted the group's recommendations to the coordinator (United States) of the correspondence group on the revision of DSC/Circ.12.

Amendments to MSC.1/Circ.1442

6.17 Having noted the views and recommendations of the group regarding amendments to MSC.1/Circ.1442 on Inspection programmes for cargo transport units carrying dangerous goods, the Sub-Committee agreed to encourage competent authorities to make use of the ability to report severe infringements to other competent authorities.

6.18 In this regard, having considered document CCC 1/6/11 (ICS) proposing amendments to MSC.1/Circ.1442 in order to improve the capacity of States and industry to address the problem of non-declared and misdeclared dangerous goods cargoes, the Sub-Committee agreed, in general, to the proposal and referred the document to E&T 23 for further consideration, taking into account comments regarding the need to clearly define the role and responsibilities of shore-based personnel and concerns that the proposed amended paragraph 5.11.8, as proposed by ICS, may be directing enforcement authorities too prescriptively.

Revision of FAL Form 7

6.19 Regarding the revision of FAL Form 7, the Sub-Committee noted the opinion of the group that a review of 5.4.3 of the IMDG Code might be necessary and considered document CCC 1/6/7 (IVODGA), proposing amendments to FAL Form 7 and stating that the Dangerous Cargo Manifest effectively serves as the transport document for vessels since the actual Dangerous Goods Declaration or other shipping paper(s) are not mandatory on-board ships in all port state jurisdictions.

6.20 The Sub-Committee agreed that the proposed amendments required detailed consideration for FAL Form 7 to be fully aligned with the IMDG Code and decided to refer document CCC 1/6/7 to E&T 23 for further consideration. In this regard, the Sub-Committee was advised that FAL 39, after considering the report of the Correspondence Group on the general revision of the FAL Convention (document FAL 39/4) which contains a proposal by Japan to also amend FAL Form 7, would request MSC 94 to instruct E&T 23 to also consider the proposal by Japan.

Prohibition of methyl bromide as disinfection agent in cotton

6.21 With regard to the the prohibition of methyl bromide as disinfecting agent in cotton in relation with MSC.1/Circ.1361, the Sub-Committee noted that the Islamic Republic of Iran was invited to submit a proposal, as appropriate, to CCC 1.

REPORT OF THE CORRESPONDENCE GROUP ON REVISION OF DSC/CIRC.12

6.22 The Sub-Committee considered the report of the Correspondence Group on the Revision of DSC/Circ.12 (CCC 1/6/1 and CCC 1/INF.8) and, having noted general support for the work carried out by the correspondence group, referred the documents to E&T 23 for further consideration with a view to finalization at CCC 2.

6.23 The Sub-Committee considered document CCC 1/6/9 (United States), proposing two options for amending section 4.0.2.3 of the IMDG Code to clarify that IMO portable tanks must be marked with an indication of conformance with the appropriate portable tank instruction. Following a brief discussion, the Sub-Committee noted that the majority of those who spoke supported option 1 (CCC 1/6/9, paragraph 4.1), and agreed to refer the document to E&T 23 for further consideration.

OTHER PROPOSALS RELATING TO AMENDMENT 38-16

Definition of IMO type 5 portable tanks

6.24 The Sub-Committee considered CCC 1/6/6 (Belgium), proposing to correct an editorial omission in the definition of "IMO type 5 portable tank" (Chapter 4.2 of the IMDG Code), specifically proposing the reintroduction of the word "liquefied" before "gases", which had been accidentally removed following reformatting of the Code, and decided to refer it to E&T 23 for further consideration.

Transport of flammable, toxic powdered metals

6.25 The Sub-Committee considered document CCC 1/6/2 (France), providing information on the regulatory and technical difficulties faced in the transport (maritime and intermodal) of cobalt powder and informing that, in order to solve such difficulties, France, under provision 7.9.1.1 of the Code, has provisionally authorized the transport of cobalt powder through an exemption covering non-compliance with SP 915. The Sub-Committee noted that the document proposed three options in order to permanently solve the issue:

.1 to modify SP 915 as follows:

"915 This entry shall not be used for wetted explosives, or self-reactive substances or metal powders.";

.2 to ignore the newly demonstrated risks (toxicity by inhalation), and continue to transport cobalt powder under entry UN 3089; or

.3 to refer the matter to the competent bodies under the aegis of the United Nations with a view to creating a new entry applicable to flammable, toxic powdered metals and identifying appropriate transport conditions.

6.26 Having considered the above document, the Sub-Committee referred it to E&T 23 for further consideration with regard to issues such as classification, packaging and SP 915 and agreed that the preferred long-term solution was for a dedicated UN number to be issued. The Sub-Committee encouraged interested Member States to submit proposals to the UN Sub-Committee of Experts on the Transport of Dangerous Goods (TDG), requesting a dedicated UN number for cobalt powder.

[Stowage of polymerizing substances

6.27 The Sub-Committee noted document CCC 1/INF.2 (Germany), containing the full casualty investigation report conducted by the German Federal Bureau for Maritime Casualty Investigation (BSU) on a fire and explosion on board the container vessel **MSC Flaminia** (14 July 2012). The Sub-Committee noted that the fire and explosion in one of the cargo holds of the ship resulted in three fatally wounded crew members and two seriously injured in addition to the structural damage to the ship and its cargo. It was further noted that the investigation report contained conclusions and recommendations regarding classification and

stowage of substances that may polymerise within the IMDG Code, crew training for firefighting and abandoning ship, availability and on board location of first aid equipment as well as accessibility to water for firefighting in addition to CO₂.

6.28 In this context, the Sub-Committee considered document CCC 1/6/3 (Germany), which based on the above casualty investigation report, proposed amendments to the IMDG Code concerning the stowage of polymerizing substances, such as assigning "Stowage Category C or D" to polymerizing substances other than gases within the dangerous goods list, including a list of potential UN numbers to be affected by this amendment. Germany also proposed the early implementation of this specific amendment, before amendment 38-16 to the IMDG Code comes into force, providing a draft CCC circular in annex 2.

6.29 Having considered the above documents, the Sub-Committee referred them to E&T 23 for further consideration.

Amendment to special provision (SP) 965

6.30 Having considered document CCC 1/6/5 (Republic of Korea), proposing to amend SP 965 in the IMDG Code, which applies to the transport of UN 2211 and UN 3314, and raising issues concerning its practicality, considering that its industrial usage is extremely limited, the Sub-Committee referred this document to E&T 23 for further consideration.

Definition of closed cargo transport unit for class 1

6.31 The Sub-Committee considered document CCC 1/6/8 (Canada), proposing to amend the definition for "closed cargo transport unit for class 1", which is based on the amendments (36-12) to part 7 of the Code, in particular, the deletion of the term for "magazines" and the new "note" for magazine requirements (provision 7.1.2 of the Code) in relation to the definition for "closed cargo transport unit for class 1". Canada stated that this new arrangement, in the related provision, gives some room to different interpretations of the term "closed cargo transport unit" which may lead to serious accidents. The Sub-Committee decided to refer the document to E&T 23 for further consideration.

Transport of substances of UN 2211 and UN 3314

6.32 The Sub-Committee considered document CCC 1/6/10 (IVODGA), expressing concerns regarding the transport of UN 2211 and UN 3314 substances in ventilated containers (authorized within the IMDG Code), in relation to SP 932 and the newly

designated "ventilated containers" within the recently adopted CTU Code. IVODGA stated that this apparent inconsistency could frustrate shipments of UN 2211 and UN 3314 and proposed that, in addition to the conditions for transport allowed in SP 965, the assignment of special provision SP 932 as an alternate to the transport of UN 2211 and UN 3314, when using the standard vented containers, should be reconsidered. The Sub-Committee decided to refer the document to E&T 23 for further consideration.

Illustrations of labels, placards and marks on packages and CTUs

6.33 The Sub-Committee noted document CCC 1/INF.3 (Republic of Korea), presenting a guideline for labelling and marking on packages and CTUs, which contains some illustrations and is intended for the convenience of end-users to improve the application of labelling and marking to dangerous goods packages.

Sub-Committee of Experts on the Transport of Dangerous Goods 45th session

6.34 Having noted document CCC 1/INF.27 (Secretariat), informing on the progress made by the UN Sub-Committee of Experts on the Transport of Dangerous Goods (TDG) on amending the Recommendations on the Transport of Dangerous Goods, Model Regulations, the Sub-Committee referred this document to E&T 23 for its consideration when preparing the draft amendment 38-16 to the Code.

DRAFT AMENDMENT 38-16 OF THE IMDG CODE AND INSTRUCTIONS TO THE E&T GROUP

Instructions to the E&T group

6.35 The Sub-Committee authorized E&T 23, which is scheduled to be held, in Spring 2015 (see paragraph [...]), to prepare the draft amendments (38-16) to the IMDG Code, based on documents submitted to CCC 1 and taking into account comments made and decisions taken in plenary. E&T 23 was also instructed to take into consideration the outcome of the UN TDG Sub-Committee with regard to the corrections to the eighteenth revised edition of the UN Recommendations on the Transport of Dangerous Goods, Model Regulations. The group should also identify and correct any editorial mistakes of amendment 37-14 of the IMDG Code and submit a written report to CCC 2.]

7 UNIFIED INTERPRETATION TO PROVISIONS OF IMO SAFETY, SECURITY AND ENVIRONMENT RELATED CONVENTIONS

7.1 The Sub-Committee noted that this was a continuous item on its biennial agenda, established by MSC 78, so that IACS could submit any newly developed or updated unified interpretations for the consideration of the Sub-Committee with a view to developing appropriate IMO interpretations, if deemed necessary. In this context, the Sub-Committee was advised that the Assembly, at its twenty-eighth session, had expanded the output to now include all proposed unified interpretations to provisions of IMO safety-, security-, and environment-related Conventions (refer to the annex of resolution A.1061(28)).

SCOPE OF APPLICATION OF THE REVISED GUIDELINES FOR THE PREPARATION OF THE CARGO SECURING MANUAL AND THE CODE OF SAFE PRACTICE FOR CARGO STOWAGE AND SECURING

7.2 Having considered document CCC 1/7 (IACS), providing in the annex a copy of IACS UI SC 266 that interprets the reference to containerhips in MSC.1/Circ.1352 on Amendments to the Code of Safe Practice for Cargo Stowage and Securing (CSS Code) and MSC.1/Circ.1353 on *Revised Guidelines for the preparation of the Cargo Securing Manual*, as meaning dedicated containerhips and other ships for which arrangements are specifically designed and fitted for the purpose of carrying containers on deck, the Sub-Committee agreed to draft MSC.1/Circ.1352/Rev.1 and MSC.1/Circ.1353/Rev.1, incorporating the IACS interpretation, as set out in annexes [...] and [...], for submission to MSC 94 for approval.

GUIDANCE ON PROVIDING SAFE WORKING CONDITIONS FOR SECURING OF CONTAINERS ON DECK

7.3 In considering document CCC 1/7/1 (IACS), providing in the annex a copy of IACS UI SC 265 regarding the provisions in section 6 of the amended version of annex 14 of the CSS Code, as provided in the annex to MSC.1/Circ.1352, in particular the dimensions and arrangements specified, the Sub-Committee agreed with the interpretation and requested the Secretariat to incorporate the interpretation for inclusion in the above draft MSC.1/Circ.1352/Rev.1, as set out in annex [...].

[8 CONSIDERATION OF REPORTS OF INCIDENTS INVOLVING DANGEROUS GOODS OR MARINE POLLUTANTS IN PACKAGED FORM ON BOARD SHIPS OR IN PORT AREAS

GENERAL

8.1 The Sub-Committee recalled that DSC 18, having considered the results of container inspection programmes based on submissions from Member Governments, had expressed its appreciation to them and had requested Member Governments to continue to submit such reports in accordance with MSC.1/Circ.1442.

INSPECTION PROGRAMMES FOR CARGO TRANSPORT UNITS CARRYING DANGEROUS GOODS

8.2 The Sub-Committee noted documents CCC 1/8 (Germany), CCC 1/8/1 (Netherlands), CCC 1/8/2 (Belgium), CCC 1/8/3 (Republic of Korea), CCC 1/8/4 (Canada) and CCC 1/8/5 (United States), which were submitted related to inspection programmes; and documents CCC 1/INF.28 and Corr.1 (Secretariat), containing the consolidated results of container inspection programmes. The Sub-Committee was informed that, among 65,929 CTUs inspected, 8,751 CTUs were found with deficiencies, which means 13.27% of the CTUs inspected had deficiencies. Total deficiencies were 10,734. As to the type of deficiencies, placarding and marking accounts for 41%, followed by securing/stowage inside the unit, which accounts for 25%.

8.3 In this respect, the Sub-Committee expressed its appreciation to those States that submitted results of container inspection programmes and its concern about the high rate of deficiencies and on the lack of adherence to the provisions of the IMDG Code.

8.4 Subsequently, the Sub-Committee invited Member States to continue submitting such reports and urged Member States which have not yet carried out container inspection programmes to do so and to submit the relevant information to the Organization in accordance with MSC.1/Circ.1442.

INVESTIGATION REPORT ON THE VERY SERIOUS MARINE CASUALTY RESULTING FROM A FIRE AND EXPLOSION ON BOARD THE CONTAINER VESSEL MSC FLAMINIA

8.5 The Sub-Committee recalled that the recommendations contained in the **MSC Flaminia** casualty investigation report relating to the IMDG Code had already been dealt with under agenda item 6 (Amendments to the IMDG Code and supplements) (see paragraph 6.[...]).]

9 REVISED GUIDELINES FOR PACKING OF CARGO TRANSPORT UNITS

GENERAL

9.1 The Sub-Committee recalled that DSC 18 had agreed that the draft CTU Code, after finalization by the IMO/ILO/UNECE Group of Experts, should be submitted directly to MSC 93 for approval and had requested the Secretariat to take action, as appropriate.

9.2 The Sub-Committee also recalled that MSC 93 had approved the IMO/ILO/UNECE Code of Practice for Packing of Cargo Transport Units (CTU Code), noting that the UNECE Inland Transport Committee, at its seventy-sixth session, had endorsed the CTU Code without changes while ILO is expected to approve the Code in November 2014.

9.3 The Sub-Committee further recalled that MSC 93 had noted that the Group of Experts had agreed not to include some annexes contained in the draft CTU Code since they were too detailed and could impair the readability of the Code, and that the removed annexes had been published on the UNECE website as draft informative material (herewith called supplementary material to the CTU Code).

9.4 The Sub-Committee noted that MSC 93, having taken into account the recommendations of the Group of Experts, decided to reinstate, on the agenda for CCC 1, the existing output on *Revised guidelines for packing of cargo transport units (5.2.3.5)* to further improve the supplementary material to the CTU Code and had invited interested Member Governments and international organizations to submit comments and proposals to CCC 1.

SUPPLEMENTARY MATERIAL TO THE CTU CODE

9.5 The Sub-Committee had the following documents for its consideration:

- .1 CCC 1/9 (Secretariat), inviting the Sub-Committee to consider possible ways of improving the supplementary material to the CTU Code, as set out in the annex, and to decide whether IMO Model Course 3.18 ought to be updated or withdrawn, in light of the availability of the CTU Code and the supplementary material;

- .2 CCC 1/9/1 (Sweden), proposing editorial improvements to text and figures of the Quick Lashing Guide and also proposing that a reference to the CTU Code be inserted in SOLAS regulation VI/5.2, and that the relevant references in the IMDG Code be updated to refer to the CTU Code; and
- .3 CCC 1/9/2 (United Kingdom), proposing to include a new table as part of the supplementary material to the CTU Code that reminds relevant parties of their roles and responsibilities, and suggesting that there is no need for the IMO Model Course 3.18 to be updated, as it does not mirror the new Code and should be withdrawn to avoid duplication.

9.6 In considering the above documents, the Sub-Committee noted the following views expressed on this matter:

- .1 information on open-top container seals should be included in the relevant part of the supplementary material to the CTU Code;
- .2 clarifying text should be included in the supplementary material to the CTU Code to:
 - .1 reinforce the fact that the specific examples of lashing arrangements shown in annex 7 of the Code are not exhaustive;
 - .2 recognize that other proven alternatives such as adhesive based systems already exist;
 - .3 allow for the development of further securing systems that meet the requirements of the Code; and
 - .4 highlight the necessity for securing systems should be applied in accordance with the manufacturer's instructions;
- .3 references in IMO instruments should eventually be updated to refer to the CTU Code but no action should be taken in this regard until the Code has also been endorsed by the ILO;

- .4 model courses are an important part of technical cooperation and an essential element in ensuring that an effective training system can be put in place, particularly in developing nations;
- .5 the development of a model course will also ensure consistent implementation and promote an effective safety culture;
- .6 IMO Model Course 3.18 should be updated in due time following accumulation of experience with the CTU Code and the supplementary material;
- .7 chapter 13 (Training in Packing of CTUs) of the CTU Code is not detailed enough and needs to be supplemented with a model course that contains clear training timetables and objectives; and
- .8 IMO should coordinate with UNECE and ILO when updating Model Course 3.18 in order to avoid proliferation of training material that could be inconsistent with each other.

9.7 Having considered the above views, the Sub-Committee agreed that IMO Model Course 3.18 (Safe Packing of Cargo Transport Units (CTUs)) should be updated, in coordination with ILO and UNECE. In this respect, the Sub-Committee invited MSC 93 to endorse the above recommendation and requested the Secretariat to take action accordingly.

9.8 The Sub-Committee also agreed that documents CCC 1/9, CCC 1/9/1 and CCC 1/9/2 should be referred to a working group for further consideration, together with comments on additional information to be included in the supplementary material to the CTU Code regarding securing methods and open-top container seals.

ESTABLISHMENT OF THE WORKING GROUP

9.9 In order to make progress on the supplementary material, the Sub-Committee established the Working Group on Container Safety (see also paragraphs 7.[...]) and instructed it, taking into account the comments and decisions made in plenary, to:

- .1 finalize the supplementary material to the CTU Code, based on document CCC 1/9, taking into account documents CCC 1/9/1 and CCC 1/9/2;
- .2 consider whether it is necessary to establish a correspondence group and, if so, prepare terms of reference for consideration by the Sub-Committee; and
- .3 submit a written report by Thursday, 11 September 2014.

Report of the Working Group on Container Safety

9.10 Having considered the part of the report of the Working Group on Container Safety (CCC 1/WP.[...]) dealing with the agenda item, the Sub-Committee took action as outlined hereunder.

[to be prepared by the Secretariat in consultation with the Chairman after the session, based on the group's report and the actions requested therein, taking into account the decisions taken by the Sub-Committee during subsequent discussions]

[10 BIENNIAL AGENDA AND PROVISIONAL AGENDA FOR CCC 2

OUTCOME OF A 28

10.1 The Sub-Committee noted that the Assembly, at its twenty-eighth session, approved the *Strategic Plan for the Organization (for the six-year period 2014 to 2019)* (resolution A.1060(28)) and the *High-level Action Plan of the organization and priorities for the 2014-2015 biennium* (resolution A.1061(28)).

BIENNIAL STATUS REPORT AND PROPOSED PROVISIONAL AGENDA FOR CCC 2

10.2 Taking into account the progress made at the session and the instructions of MSC 93, the Sub-Committee prepared its biennial status report for the 2014-2015 biennium (CCC 1/WP.2, annex 1) and the proposed provisional agenda for CCC 2 (CCC 1/WP.2, annex 2), as set out in annexes [...] and [...], respectively, for consideration by MSC 94.

Correspondence groups established at the session

10.3 The Sub-Committee established correspondence groups on the following subjects, due to report to CCC 2:

[to be completed by the Secretariat after the session]

ARRANGEMENTS FOR THE NEXT SESSION

10.4 The Sub-Committee agreed to establish at its next session working and drafting groups on the following subjects:

[to be completed by the Secretariat after the session]

whereby the Chairman, taking into account the submissions received, would advise the Sub-Committee well in time before CCC 2 on the final selection of such groups.

INTERSESSIONAL MEETING

10.5 The Sub-Committee invited MSC 94 and MEPC 68 to approve the holding of two intersessional meetings of the E&T Group in 2015.

URGENT MATTERS TO BE CONSIDERED BY MSC 94

10.6 The Sub-Committee noted that, due to the close proximity between CCC 1 and MSC 94, the Committee would only consider the following urgent matters emanating from this session, with the remainder being considered by MSC 95:

- .1 draft International Code of Safety for Ships using Gases or other Low-flashpoint Fuels (IGF Code) and the associated SOLAS amendments;
- .2 draft Informative Material to the CTU Code; and
- .3 draft revisions to MSC.1/Circ.1352 on amendments to the Code of Safe Practice for Cargo Stowage and Securing (CSS Code) and MSC.1/Circ.1353 on *Revised Guidelines for the preparation of the Cargo Securing Manual*.

Relaxation of submission deadlines for MSC 94

10.7 Due to the close proximity between CCC 1 and MSC 94 and noting that the final day of CCC 1 coincided with the deadline for submission of non-bulky documents to MSC 94, the Sub-Committee was advised that the Chairman of MSC 94 had approved a two-week extension of the deadline of non-bulky and commenting documents submitted to MSC 94 for urgent matters emanating from CCC 1 (i.e. 26 September 2014 and 10 October 2014, respectively).]

Date of next session

10.8 The Sub-Committee noted that the second session of the Sub-Committee has been tentatively scheduled to take place from [14 to 18 September 2015].]

[11 ELECTION OF CHAIRMAN AND VICE-CHAIRMAN FOR 2015

11.1 In accordance with the Rules of Procedure of the Maritime Safety Committee, the Sub-Committee unanimously re-elected Mr. Xie Hui (China) as Chairman and Mr. Patrick Van Lancker (Belgium) as Vice-Chairman, both for 2015.]

12 ANY OTHER BUSINESS

MEASURES TO PREVENT LOSS OF CONTAINERS

12.1 The Sub-Committee noted that documents CCC 1/12 (France and Spain) and CCC 1/INF.9 (World Shipping Council) had been submitted under this agenda item, since DSC 18 had decided that its work on the related planned output on Measures to prevent loss of containers (5.2.3.2) had been completed and, therefore, had not included it on the proposed agenda for CCC 1.

12.2 In this regard, the Sub-Committee was advised that A 28 had retained Measures to prevent loss of containers (5.2.3.2) as a planned output for the biennium 2014-2015, with an expected completion date of 2014, until the Maritime Safety Committee adopted the draft amendments to SOLAS regulation VI/2 related to mandatory verification of gross mass of a container, which is expected to take place at MSC 94 in November 2014.

12.3 Taking the above information into account, the Sub-Committee considered the following documents:

- .1 CCC 1/12 (France and Spain), proposing additional measures on top of the ones already implemented by the Organization, further to important and recurring losses of containers, aimed at improving prevention and information available to States in order to better deal with these losses; and
- .2 CCC 1/12/1 (WSC), presenting annual estimates of the number of containers lost at sea for the period 2008 to 2013, based on the results of two WSC surveys of its member lines in 2011 and 2014.

12.4 The Sub-Committee, having noted with appreciation the estimates provided by WSC, decided that, although the proposals contained in document CCC 1/12 were significant and had merit, they went beyond the original scope of the output on Measures to prevent loss of containers (5.2.3.2), as agreed by MSC 89 (MSC 89/25, paragraph 22.6), to an extent that they would constitute a new unplanned output. Consequently, the Sub-Committee invited interested Member States to submit proposals for new unplanned outputs in accordance with the Committees' Guidelines.

[SAFETY REQUIREMENTS FOR CARRIAGE OF LIQUEFIED HYDROGEN IN BULK

12.5 The Sub-Committee noted the information in document CCC 1/INF.23 (Japan), regarding the Hydrogen Energy Supply Chain (HESC) project planned by Japan which will include consideration of requirements for carriage of liquefied hydrogen in bulk by ship.

NATURAL GAS HYDRATES

12.6 The Sub-Committee noted the information in document CCC 1/INF.26 (Republic of Korea), on the results of a study regarding loading and unloading systems on natural gas hydrate (NGH) transport vessels.

COUNTERFEIT REFRIGERANTS

12.7 The Sub-Committee noted the information in document CCC 1/INF.29 (IICL), providing an update on the informal correspondence group for the development of best practices for preventing the use of counterfeit refrigerants, chaired by IICL.

SUB-COMMITTEE CIRCULARS

12.8 Referring to the restructuring of the IMO Sub-Committees, which took effect on 1 January 2014, the Sub-Committee requested the Secretariat to issue all future circulars as "CCC circulars", where appropriate. MSC 93 was invited to note the above decision.]

[13 ACTION REQUESTED OF THE COMMITTEES

13.1 The Maritime Safety Committee, at its ninety-fourth session, is invited to:

[to be prepared by the Secretariat in consultation with the Chairman after the meeting]

13.2 The Maritime Safety Committee, at its ninety-fifth session, is invited to:

[to be prepared by the Secretariat in consultation with the Chairman after the meeting]

13.3 The Marine Environment Protection Committee, at its sixty-eighth session, is invited to:

[to be prepared by the Secretariat in consultation with the Chairman after the meeting]

ANNEXES

[to be prepared by the Secretariat after the session]
