

MARINE ENVIRONMENT PROTECTION
COMMITTEE
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**REPORT OF THE MARINE ENVIRONMENT PROTECTION COMMITTEE
ON ITS SIXTY-FIFTH SESSION**

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1 INTRODUCTION

1.1 The sixty-fifth session of the Marine Environment Protection Committee was held at IMO Headquarters from 13 to 17 May 2013, under the chairmanship of Mr. Andreas Chrysostomou (Cyprus). The Vice-Chairman of the Committee, Mr. Arsenio Dominguez (Panama), was also present.

1.2 The session was attended by delegations from Members and Associate Members; by representatives from United Nations Programmes, specialized agencies and other entities; by observers from the intergovernmental organizations with agreements of cooperation; and by observers from non-governmental organizations in consultative status; as listed in document MEPC 65/INF.1.

1.3 The Chairman of the Council, Mr. Jeffrey G. Lantz (United States); the Chairman of the Facilitation Committee (FAL), Mr. Yury Melenas (Russian Federation); the Chairman of the Sub-Committee on Bulk Liquids and Gases (BLG), Mr. Sveinung Oftedal (Norway); the Chairman of the Sub-Committee on Ship Design and Equipment (DE), Dipl.-Ing. Anneliese Jost (Germany); the Chairman of the Sub-Committee on Flag State Implementation (FSI), Capt. Dwain Hutchinson (Bahamas); and the Chairman of the Sub-Committee on Stability and Load Lines and on Fishing Vessels Safety (SLF), Mr. Kevin Hunter (United Kingdom); were also present.

The Secretary-General's opening address

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/MediaCentre/SecretaryGeneral/Secretary-GeneralsSpeechesToMeetings/Pages/MEPC-65-opening.aspx>

Chairman's remarks

1.5 The Chairman 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.

Information on the Genoa port crash by the delegation of Italy

1.6 The delegation of Italy informed the Committee that on Tuesday, 7 May, at around 11.30 p.m., a 40,594-tonne containership **Jolly Nero** belonging to Ignazio Messina & Co., collided into the 55-m port tower of Genoa, bringing it down, and resulting in the death of eight people (five Coast Guards and three pilots). One Coast Guard Petty Officer is still missing and four officers were injured, two of them seriously.

1.7 It was the stern of the ship that brought down the tower. The crash happened when the ship, which was assisted by two tugboats and with the pilot on its bridge, was backing out of the port. At the time of the incident, the sea was calm, there was no wind and visibility was perfect. Investigations are in progress.

Adoption of the agenda

1.8 The Committee adopted the agenda (MEPC 65/1) and agreed to be guided by the provisional timetable (MEPC 65/1/1, annex 2, as revised), on the understanding that it was subject to adjustments depending on the progress made each day. The agenda, as adopted,

with a list of documents considered under each agenda item, is set out in document MEPC 65/INF.28.

Credentials

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

2 HARMFUL AQUATIC ORGANISMS IN BALLAST WATER

2.1 The Committee noted that the number of Contracting Governments to the "International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004" (BWM Convention) is currently 36, representing 29.07 per cent of the world's merchant fleet tonnage. The Committee urged those States which have not yet ratified the Convention to do so at their earliest possible opportunity.

CONSIDERATION AND APPROVAL OF BALLAST WATER MANAGEMENT SYSTEMS THAT MAKE USE OF ACTIVE SUBSTANCES

2.2 The Committee noted that the twenty-fourth and twenty-fifth meetings of the GESAMP-BWWG were held from 10 to 14 December 2012 and from 21 to 26 January 2013 respectively, at IMO Headquarters, under the chairmanship of Mr. Jan Linders. During the two meetings, the GESAMP-BWWG had reviewed a total of eight proposals for approval of ballast water management systems that make use of Active Substances, submitted by China, India, the Netherlands (two proposals), Norway, Japan, and the Republic of Korea (two proposals).

Basic Approval

2.3 The Committee, having considered the recommendations contained in annex 6 to the "Report of the twenty-fourth meeting of the GESAMP-BWWG" (MEPC 65/2/9), and the recommendations contained in annexes 4 and 6 to the "Report of the twenty-fifth meeting of the GESAMP-BWWG" (MEPC 65/2/19), agreed to grant Basic Approval to:

- .1 Van Oord Ballast Water Management System proposed by the Netherlands in document MEPC 65/2/2;
- .2 REDOX AS Ballast Water Management System proposed by Norway in document MEPC 65/2/3; and
- .3 Blue ZoneTM Ballast Water Management System proposed by the Republic of Korea in document MEPC 65/2/5.

2.4 The Committee invited the Administrations of the Netherlands, Norway and the Republic of Korea to take into account all the recommendations made in the aforementioned reports of the GESAMP-BWWG (annex 6 to the report of the twenty-fourth meeting and annexes 4 and 6 to the twenty-fifth meeting) during the further development of the systems.

2.5 The Committee noted that the GESAMP-BWWG considered that the proposal for Basic Approval of the Van Oord Ballast Water Management System provided sufficient certainty with regard to environmental protection, safety for the ship and human health and that the application fulfilled the requirements of Procedure (G9) for Final Approval. The Committee further noted that the GESAMP-BWWG was of the view that there was

no further need to review the application for Final Approval if the limitations specified in annex 6 to the report of the twenty-fourth meeting of the GESAMP-BWWG (MEPC 65/2/9) are taken into account.

2.6 The delegation of India stated their disagreement with the recommendation in annex 8 of the "Report to the twenty-fifth meeting of the GESAMP-BWWG" (MEPC 65/2/19) not to grant Basic Approval to the HyCator[®]: BWT Reactor System proposed by India in document MEPC 65/2/7, and requested that detailed comments in this regard be considered by the Ballast Water Review Group. The Committee agreed with this request and instructed the Review Group accordingly.

2.7 The Committee noted that the report of the twenty-fifth meeting of the GESAMP-BWWG (MEPC 65/2/19) contained an error with regard to the REDOX AS Ballast Water Management System, which uses medium pressure UV irradiation instead of low pressure as stated in the report.

Final Approval

2.8 The Committee, having considered the recommendations contained in annex 5 to the "Report of the twenty-fourth meeting of the GESAMP-BWWG" (MEPC 65/2/9), as well as the recommendations contained in annexes 5 and 7 to the "Report of the twenty-fifth meeting of the GESAMP-BWWG" (MEPC 65/2/19), agreed to grant Final Approval to:

- .1 AQUARIUS[®] EC Ballast Water Management System proposed by the Netherlands in document MEPC 65/2/1;
- .2 EcoGuardian[™] Ballast Water Management System proposed by the Republic of Korea in document MEPC 65/2/4; and
- .3 OceanDoctor Ballast Water Management System proposed by China in document MEPC 65/2/6.

2.9 The Committee invited the Administrations of China, the Netherlands and the Republic of Korea to verify that all recommendations contained in the reports of the twenty-fourth and twenty-fifth meetings of the GESAMP-BWWG (MEPC 65/2/9, annex 5 for the Netherlands; MEPC 65/2/19, annex 5 for the Republic of Korea and annex 7 for China) are fully addressed prior to the issuance of the Type Approval Certificates.

2.10 The Committee concurred with the recommendation in annex 4 of the "Report of the twenty-fourth meeting of the GESAMP-BWWG" (MEPC 65/2/9) not to grant Final Approval to the Ballast Water Management System with PERACLEAN[®] Ocean (SKY SYSTEM[®]) proposed by Japan in document MEPC 65/2.

Future meetings of the GESAMP-BWWG

2.11 The Committee noted that the next regular meeting of the GESAMP-BWWG (i.e. the twenty-sixth meeting) has been tentatively scheduled from 28 October to 1 November 2013, and invited Members to submit their proposals for approval (application dossiers) and the non-confidential description of their ballast water management systems to MEPC 66 as soon as possible but not later than 13 September.

2.12 The Committee further noted that, recognizing the possibility that more than four proposals may be submitted for review by the Group and subsequent approval by MEPC 66, the GESAMP-BWWG had expressed its availability to have an additional meeting, (GESAMP-BWWG 27) in December 2013 to accommodate as many proposals as possible, provided that all the necessary conditions for organizing such a meeting are met. Any proposal for approval that is not reviewed in the twenty-sixth meeting and the additional meeting (i.e. the twenty-seventh meeting), due to time constraints, will be reviewed at the earliest meeting of the Group after MEPC 66 and reported to MEPC 67 (MEPC 65/2/19, section 3 of the report of the twenty-fifth meeting of the GESAMP-BWWG).

Other matters emanating from the GESAMP-BWWG meetings

2.13 Having considered the recommendations of the GESAMP-BWWG regarding the optimization of the evaluation of the proposals for approval, the Committee agreed to:

- .1 note that, in accordance with the decision by MEPC 63, the revised Methodology for information gathering and conduct of work of the GESAMP-BWWG (BWM.2/Circ.13/Rev.1) has been applied to all submissions for Basic Approval to MEPC 65 and will be applied to subsequent submissions for Final Approval of those systems; and
- .2 remind Administrations of their responsibility to conduct a careful completeness check to ensure that any future applications submitted in accordance with the revised Methodology, satisfy all the provisions in it.

ORGANIZATIONAL ARRANGEMENTS RELATED TO THE EVALUATION AND APPROVAL OF BALLAST WATER MANAGEMENT SYSTEMS

2.14 The Committee recalled that, in considering the report of the Third Stocktaking Workshop of the GESAMP-Ballast Water Working Group, MEPC 62 endorsed the proposal of the GESAMP-BWWG to conduct the stocktaking meetings on a yearly basis.

2.15 The Committee noted that the Fourth Stocktaking Workshop on the activity of the GESAMP-Ballast Water Working Group was held in Busan, the Republic of Korea from 14 to 17 August 2012, under the chairmanship of Mr. Jan Linders, and its outcome has been circulated in document MEPC 65/2/8.

2.16 The Committee noted the outcome of the Fourth Stocktaking Workshop and requested the Review Group to consider the inconsistencies between the Methodology for information gathering and conduct of work of the GESAMP-BWWG (BWM.2/Circ.13/Rev.1) and Circulars BWM.2/Circ.28 and BWM.2/Circ.37 and to advise the Committee accordingly.

2.17 The Committee agreed that any changes to the Methodology should not disadvantage proposals for approval of ballast water management systems submitted in accordance with a previous version of the Methodology, and clarified that proposals submitted for Basic Approval under one version of the Methodology, could be submitted for Final Approval under the same version.

2.18 Referring to paragraph 9 of the outcome of the Fourth Stocktaking Workshop of the GESAMP-BWWG, the observer from ICS noted that the revised Methodology for information gathering and conduct of work of the GESAMP-BWWG (BWM.2/Circ.13/Rev.1) strongly recommends carrying out ecotoxicity testing in three salinities at Basic Approval. The Committee noted that this may be relevant for the Ballast Water Review Group to take into consideration when conducting its future reviews.

2.19 The Committee noted the information provided in document MEPC 65/INF.14 (Secretariat) on the GESAMP-BWWG Database of 18 chemicals most commonly associated with treated ballast water. The Committee was also reminded that no additional supporting information regarding substances in the Database is required in proposals for approval of ballast water management systems that make use of Active Substances. The Committee further noted that the Fourth Stocktaking Workshop of the GESAMP-BWWG decided to increase the number of substances in the Database, to be made available when completed.

REVIEW OF THE AVAILABILITY OF BALLAST WATER TREATMENT TECHNOLOGIES

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

- .1 MEPC 65/INF.2 (Norway) on the Type Approval of the OceanGuard™ Ballast Water Management System;
- .2 MEPC 65/INF.5 (Denmark) on the Type Approval of the DESMI Ocean Guard OxyClean Ballast Water Management System;
- .3 MEPC 65/INF.11 (Netherlands) on the Type Approval of the Wärtsilä AQUARIUS® UV ballast water management system;
- .4 MEPC 65/INF.12 (Norway) on the Type Approval of the KBAL Ballast Water Management System;
- .5 MEPC 65/INF.13 (Norway) on the Type Approval of the CrystalBallast® Ballast Water Management System; and
- .6 MEPC 65/INF.26 (South Africa) on the Type Approval of the Resource Ballast Technologies System Ballast Water Management System,

which increases the total number of type-approved ballast water management systems to 33.

2.21 The Committee thanked the delegations of Denmark, the Netherlands, Norway and South Africa for the information provided and instructed the Ballast Water Review Group to take this information into consideration when conducting its future reviews.

ASSEMBLY RESOLUTION ON APPLICATION OF THE BWM CONVENTION

2.22 The Committee recalled that MEPC 64 had agreed to the establishment of a Correspondence Group on an Assembly resolution regarding the *Application of the International Convention for the Control and Management of Ships' Ballast Waters and Sediments, 2004*, to ease and facilitate the smooth implementation of the Convention.

2.23 In considering the report of the correspondence group (document MEPC 65/2/11 (Japan)), the Committee noted that the group had used Assembly resolution A.1005(25) as a basis for discussions and arrived at three main options to relax the implementation schedule stipulated in regulation B-3 of the Convention.

2.24 The Committee considered document MEPC 65/2/18 (Secretariat) which provided legal comments and advice on the considerations of the correspondence group.

2.25 In the ensuing discussion, a clear majority of delegations expressed their support for option B, proposing an Assembly resolution that recommends an enforcement schedule drawn from one of four sub-options, as it would provide the most practical way forward while avoiding any undesirable legal uncertainty.

2.26 A number of delegations supported sub-option 2 or 3 presented in document MEPC 65/2/11, as these would reschedule enforcement of regulation B-3 of the BWM Convention only for ships constructed before 2012 or 2009 respectively. These delegations were of the view that these sub-options would provide a smoother implementation and reduce the peak of installation demand expected after entry into force of the Convention.

2.27 The majority of delegations, however, expressed their support for sub-option 1, which would reschedule the enforcement of regulation B-3 for all ships constructed before the entry into force of the Convention.

2.28 The delegation of Canada proposed an additional "sub-option 5", based on an enforcement schedule with upcoming dates implemented nationally by one major Administration and requested this to be included in the considerations of the draft Assembly resolution.

2.29 Some delegations stated their preference for adopting a protocol to amend the BWM Convention, as this would provide more legal certainty than an Assembly resolution.

2.30 The Committee, having considered the above views, agreed to request the Review Group to finalize the draft Assembly resolution based on option B and sub-option 1 provided in document MEPC 65/2/11, taking into consideration documents MEPC 65/2/13, MEPC 65/2/18, MEPC 65/2/20 and the enforcement schedule implemented nationally by one major Administration, as suggested by Canada. The Chairman emphasized that he would wish to submit only one text of the draft resolution, preferably without any square brackets, to the twenty-eighth regular session of the Assembly in November 2013.

2.31 The Committee considered document MEPC 65/2/20 (India), commenting on document MEPC 65/2/11 and providing a concept of port-based BWTBoats as an alternative to ballast water management systems on board ships, and decided to refer it to the Ballast Water Review Group for further consideration.

2.32 The Committee further noted document MEPC 65/2/13 (FOEI et al.), which reports on the continuously increasing number of invasive species and calls for early ratification of the BWM Convention.

CONSIDERATION OF THE MANNER OF APPLICATION OF THE BWM CONVENTION

Application of the HSSC

2.33 The Committee considered document MEPC 65/2/15 (Republic of Korea) proposing to apply the Harmonized System of Survey and Certification (HSSC) at the first issuance of International Ballast Water Management Certificates, by reflecting this in the draft Assembly resolution on Application of the BWM Convention or by amending BWM.2/Circ.40 on issuance of Ballast Water Management Certificates prior to entry into force of the BWM Convention and Ballast Water Management Plans approved according to resolution A.868(20).

2.34 Although some delegations shared the concerns of the Republic of Korea, that clarification is needed with regard to the survey and anniversary dates, the Committee agreed that the matter should not be considered before finalization of the draft Assembly resolution. The Committee instructed the Ballast Water Review Group to briefly consider the proposal in document MEPC 65/2/15, and advise the Committee on whether it should be pursued further.

Clarification of "major conversion"

2.35 The Committee recalled that MEPC 64 agreed with the proposal by Japan, not to consider the new installation of ballast water management systems "major conversion" as defined in regulation A.1.5 of the BWM Convention, and instructed the Secretariat to prepare a draft circular in this respect for consideration and approval by the Committee at this session. In considering document MEPC 65/WP.3 containing the draft BWM circular, the Committee also considered document MEPC 65/2/12 (IACS) proposing a further clarification on the application of regulation A-1.5.2.

2.36 The Committee instructed the review group to consider the proposal by IACS together with the draft BWM Circular on clarification of "major conversion" as defined in regulation A-1.5 and advise the Committee as appropriate.

The use of drinking water as ballast water

2.37 The Committee considered document MEPC 65/2/14 (Germany et al.) on the use of drinking water as an additional ballast water management option, proposing an application procedure for approval of the use of Active Substances in drinking water. The Committee, in agreeing that this complex matter requires thorough consideration, noted that the GESAMP Trust Fund may not be the appropriate source for funding possible requests for the advice of the GESAMP-BWWG on this matter and that the decision to supply drinking water to ships remains the prerogative of the port State.

2.38 The Committee requested the review group to consider document MEPC 65/2/14 in detail and advise the Committee accordingly. In this respect, the Committee also instructed the review group to consider the recommendations of the GESAMP-BWWG regarding the Basic Approval of the Van Oord Ballast Water Management System (MEPC 65/2/9, annex 6).

Mobile Offshore Units

2.39 The Committee considered document MEPC 65/2/16 (Singapore) on ensuring compliance of Mobile Offshore Units with the BWM Convention by using the internal circulation method or discharge at the same location, and instructed the Ballast Water Review Group to consider the proposal in detail, bearing in mind that adoption of unified interpretations is to be left to Parties to the Convention, once it enters into force, and advise the Committee accordingly.

CONSIDERATION OF OTHER ASPECTS RELATED TO BALLAST WATER MANAGEMENT AND CONTROL

2.40 The Committee, having considered document MEPC 65/2/10 on the production of a manual entitled "Ballast Water Management – How to do it":

- .1 invited Member States, competent international or regional organizations, and industry programmes to promote and provide, directly or through IMO, support and technical assistance to secure the necessary funding for the

development of the manual "Ballast Water Management – How to do it", in accordance with resolution 3, adopted by the International Conference on Ballast Water Management for Ships (2004); and

- .2 invited the Technical Co-operation Committee to include in the Organization's Integrated Technical Co-operation Programme the provisions to contribute and support the production of such a manual.

2.41 The Committee thanked Transport Canada for its financial support of \$20,000 Canadian dollars for the development of the manual "Ballast Water Management – How to do it".

OUTCOME OF BLG 17 CONCERNING THE BWM CONVENTION

2.42 The Committee noted that the Sub-Committee on Bulk Liquids and Gases held its seventeenth session from 4 to 8 February 2013, and its report on that session has been circulated under the symbol BLG 17/18. The outcome of BLG 17 was reported in document MEPC 65/11/2.

2.43 The Committee considered the action requested of the Committee in document MEPC 65/11/2, which concerns the BWM Convention, paragraphs 2.8 to 2.12, and:

- .1 approved the draft BWM Circular on *Guidance on ballast water sampling and analysis for trial use in accordance with the BWM Convention and Guidelines (G2)*, as set out in annex 5 to document BLG 17/18, and instructed the Secretariat to disseminate it as BWM.2/Circ.42;
- .2 considered and agreed in principle with the recommendations related to the trial period for reviewing, improving and standardizing the BWM Circular on *Guidance on ballast water sampling and analysis for trial use in accordance with the BWM Convention and Guidelines (G2)*, as set out in annex 6 to document BLG 17/18;
- .3 adopted, by resolution MEPC.228(65), *Information reporting on type approved ballast water management systems*, as set out in annex 1;
- .4 approved the draft BWM circular on amendments to the *Guidance for Administrations on the type approval process for ballast water management systems in accordance with Guidelines (G8)* (BWM.2/Circ.28), as set out in annex 8 to document BLG 17/18, and instructed the Secretariat to disseminate it as a BWM.2/Circ.43; and
- .5 approved the draft BWM circular on options for ballast water management for Offshore Support Vessels in accordance with the BWM Convention, as set out in annex 9 to document BLG 17/18, and instructed the Secretariat to disseminate it as BWM.2/Circ.44.

2.44 The delegation of the United States reserved its position on the principle of port States refraining from applying criminal sanctions or detaining ships on the basis of sampling during the trial period of the *Guidance on ballast water sampling and analysis in accordance with the BWM Convention and Guidelines (G2)*.

2.45 The Committee noted the information on sampling of ballast water for compliance, provided in document MEPC 65/2/17 (WWF), and requested BLG to take it into consideration when developing future revisions of the BWM Circular on *Guidance on ballast water sampling and analysis for trial use in accordance with the BWM Convention and Guidelines (G2)*, and FSI to take it into consideration in the development of the *Guidelines for port State control under the BWM Convention*.

OUTCOME OF FSI 21 CONCERNING THE BWM CONVENTION

2.46 The Committee noted that the FSI Sub-Committee held its twenty-first session from 4 to 8 March 2013, and its report on that session has been circulated under the symbol FSI 21/18. The Committee further noted that FSI 21 established a correspondence group under the coordination of Canada to develop the *Guidelines for port State control under the BWM Convention* for finalization at FSI 22 and agreed that the correspondence group would not commence work until after MEPC 65.

2.47 The Committee noted that FSI 21 had invited MEPC 65 to amend the draft terms of reference agreed for the correspondence group as deemed appropriate after its conclusion of matters related to sampling and analysis of ballast water.

2.48 The Chairman of the BLG Sub-Committee proposed that the port State control Guidelines should reflect the trial period of the BWM Circular on *Guidance on ballast water sampling and analysis for trial use in accordance with the BWM Convention and Guidelines (G2)*, and the Assembly resolution regarding the application of the International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004, expected to be adopted at Assembly 28.

2.49 The Committee instructed the Review Group to consider the terms of reference set out in paragraph 8.8 of document FSI 21/18, taking into account the proposal by the Chairman of BLG, and advise the Committee accordingly.

OUTCOME OF C 109 CONCERNING THE BWM CONVENTION

2.50 The Committee noted that the Council held its 109th session from 5 to 9 November 2012, and its summary of decisions on that session has been circulated under the symbol C 109/D. The outcome of Council 109 has been reported in document MEPC 65/12.

2.51 The Committee noted the outcome of C 109 relevant to ballast water, recognizing that technical issues remain outstanding and urging the MEPC to identify and suggest pragmatic solutions to any impediments, in particular port State control issues, to the early entry into force and implementation of the Convention. The Committee urged Member States and observers to propose pragmatic solutions to any impediments related to the ratification and implementation of the BWM Convention.

ESTABLISHMENT OF THE BALLAST WATER REVIEW GROUP

2.52 The Committee agreed to establish the Ballast Water Review Group with the following terms of reference:

"Taking into consideration the comments and decisions made in plenary, the Ballast Water Review Group is instructed to:

- .1 consider the inconsistencies between the Methodology for information gathering and conduct of work of the GESAMP-BWWG (BWM.2/Circ.13/Rev.1) and Circulars BWM.2/Circ.28 and BWM.2/Circ.37 and propose an appropriate course of action;
- .2 consider, with a view to finalizing the draft Assembly resolution on Application of the International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004, based on option B and sub-option 1 presented in document MEPC 65/2/11, taking into consideration documents MEPC 65/2/13, MEPC 65/2/18, MEPC 65/2/20, and Canada's request in plenary, to discuss the fact that one major trading Administration has established an implementation schedule with upcoming dates;
- .3 consider the proposal in document MEPC 65/2/15 to achieve a uniform application of the HSSC scheme at the first issuance of International Ballast Water Management Certificates and advise the Committee whether the matter should be pursued further;
- .4 consider amending the text of the draft circular on clarification of "major conversion" as defined in regulation A-1.5 of the BWM Convention as proposed by IACS in document MEPC 65/2/12;
- .5 consider the proposal in document MEPC 65/2/14 on using drinking water as an additional ballast water management option and propose an appropriate course of action;
- .6 consider the proposal in document MEPC 65/2/16 on ballast water management for Mobile Offshore Units and advise the Committee accordingly;
- .7 consider the terms of reference for the correspondence group established at FSI 21, to develop the guidelines for port State control under the BWM Convention, set out in paragraph 8.8 of document FSI 21/18 and advise the Committee accordingly;
- .8 consider document MEPC 65/2/20 (India) providing a concept describing the port-based BWTBoats as an alternative to onboard fitment of ballast water management systems and advise the Committee accordingly;
- .9 consider the comments of India on the recommendation of the GESAMP-BWWG, at its twenty-fifth meeting (document MEPC 65/2/19, annex 8), not to grant Basic Approval to the HyCator[®]: BWT Reactor System and advise the Committee as appropriate; and
- .10 submit a written report on the work carried out, including findings and recommendations, to plenary on Thursday, 16 May 2013."

CONSIDERATION OF THE REPORT OF THE BALLAST WATER REVIEW GROUP

2.53 Having considered the report of the Ballast Water Review Group (MEPC 65/WP.7/Rev.1), the Committee approved it in general and took action as outlined in the following paragraphs.

2.54 The delegation of Denmark, supported by the delegations of Italy, the Republic of Korea and Sweden, made a statement expressing concern with sub-option 1 for the draft Assembly resolution on Application of the BWM Convention. The observer from CESA, in supporting the statement by Denmark, also made a statement regarding their concerns in respect of the consequences of the resolution. The full statements are set out in annex 2

2.55 The delegation of Germany, in informing the Committee of its intention to deposit its instrument of accession to the BWM Convention in June 2013, expressed some concern regarding the legal implications of the draft Assembly resolution on the envisaged accession to the Convention. The full statement is set out in annex 2.

2.56 The delegation of Spain, having not been able to participate in the work of the Review Group, made a general comment regarding the use of drinking water generated on board as ballast water, and expressed its view that the approval of such technologies through Procedure (G9) needs further consideration.

2.57 With regard to the actions requested by the review group, the Committee:

- .1 noted that the Group agreed with the proposal by the Chairman of the GESAMP-BWWG that the GESAMP-BWWG would resolve the inconsistencies between the Methodology for information gathering and conduct of work of the GESAMP-BWWG (BWM.2/Circ.13/Rev.1) and Circulars BWM.2/Circ.28 and BWM.2/Circ.37 via changes in the Methodology;
- .2 considered the concern expressed in the Group, that clarification is required in the draft Assembly resolution on Application of the International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004, with respect to renewal dates related to statutory or classification certificates or the anniversary date of delivery of the ship for the purposes of determining the date of the renewal survey, which will effectively determine the date of compliance with regulation D-2 under the approach of the Assembly resolution;

In considering this action item, the delegation of Canada stated that, in considering document MEPC 65/2/15, the Ballast Water Review Group noted that in the draft Assembly resolution, referring to a ballast water management renewal survey that is not harmonized with the renewal survey in other statutory instruments, could lead to a situation where the demand for ballast water management systems will suddenly peak five years after the entry into force of the BWM Convention. The full statement is set out in annex 2.

The delegation of Canada further informed the Committee that to avoid the situation described above, a meeting attended by a number of delegations outside normal working hours had developed the following text to be included as a new sub-paragraph 2.6 in the draft Assembly resolution as set out in annex 1 to document MEPC 65/WP.7/Rev.1:

"2.6 The renewal survey referred to in paragraphs 2.1 to 2.4 is the renewal survey associated with the International Oil Pollution Prevention Certificate under MARPOL Annex I."

After consideration, the Committee agreed with the proposal and instructed the Secretariat to include the additional paragraph 2.6 in the draft Assembly resolution.

The delegation of Spain expressed its concern with regard to linking the compliance of certain provisions of the Convention with the issuance of statutory certificates, as these dates could easily be adjusted, and stated its preference for using fixed dates instead;

- .3 approved the draft Assembly resolution on Application of the International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004, as set out in annex 3, to be submitted to A 28 for adoption;
- .4 approved the amended draft circular on clarification of "major conversion" as defined in regulation A-1.5 of the BWM Convention and instructed the Secretariat to disseminate it as BWM.2/Circ.45;
- .5 approved the action plan set out in paragraph 24 of document MEPC 65/WP.7/Rev.1, with respect to the use of drinking water as ballast water;
- .6 approved the draft circular on Application of the BWM Convention to Mobile Offshore Units and instructed the Secretariat to disseminate it as BWM.2/Circ.46.

Following a proposal by the delegation of the Bahamas, the Committee instructed the Secretariat to consider including, in the circular, a reference to a definition of Mobile Offshore Units, currently under development by the Sub-Committee on Standards of Training and Watchkeeping;

- .7 approved the amended Terms of Reference for the correspondence group established at FSI 21 to develop the Guidelines for port State control under the BWM Convention, as set out in annex 4 to document MEPC 65/WP.7/Rev.1;
- .8 invited the delegation of India to clarify the issues identified with regard to the BWTBoat concept and keep the Committee informed;
- .9 noted the intention of the delegation of India to submit a new proposal for Basic Approval of the HyCator[®]: BWT Reactor System to a future GESAMP-BWWG meeting.

Consequently, the Committee agreed with the recommendation in annex 8 of the "Report of the twenty-fifth meeting of the GESAMP-BWWG" (MEPC 65/2/19) not to grant Basic-Approval to the HyCator[®]: BWT Reactor System proposed by India in document MEPC 65/2/7; and

- .10 agreed to re-establish the Review Group at MEPC 66 in accordance with the provisions of regulation D-5 of the BWM Convention.

2.58 The Committee thanked the Chairman of the Review Group and its members for their hard work.

3 RECYCLING OF SHIPS

3.1 The Committee recalled that MEPC 62 and MEPC 63 had adopted the following four guidelines referred to in the Hong Kong Convention, which are intended to assist States in the early implementation of the Convention's technical standards:

- *2011 Guidelines for the Development of the Ship Recycling Plan;*
- *2011 Guidelines for the Development of the Inventory of Hazardous Materials;*
- *2012 Guidelines for Safe and Environmentally Sound Ship Recycling; and*
- *2012 Guidelines for the Authorization of Ship Recycling Facilities.*

3.2 The Committee also recalled that MEPC 64, which concluded the work on all the six guidelines required under the Hong Kong Convention, had adopted:

- *2012 Guidelines for the Inspection of Ships under the Hong Kong Convention;*
and
- *2012 Guidelines for the Survey and Certification of Ships under the Hong Kong Convention.*

3.3 The Committee recalled further that MEPC 64 had established an intersessional Correspondence Group on Ship Recycling, which had been instructed to develop threshold values and exemptions applicable to the materials to be listed in Inventories of Hazardous Materials and to consider the need to amend accordingly the *2011 Guidelines for the Development of the Inventory of Hazardous Materials* (Inventory Guidelines), which is where threshold values and exemptions are listed.

Planning of the work

3.4 The Committee had for its consideration five documents submitted under the agenda item, and agreed to deal with the issue of threshold values and exemptions first, followed by proposed amendments to the *2012 Guidelines for the Inspection of Ships under the Hong Kong Convention* (Inspection Guidelines).

Development of threshold values and exemptions

3.5 In considering documents MEPC 65/3 and MEPC 65/INF.9 reporting on the deliberations of the intersessional correspondence group, the Committee noted that the group had made good progress, but that various threshold values and the issue of exemptions as well as certain underlying concepts still had to be discussed.

3.6 The Committee thanked the United States for its contribution as coordinator of the correspondence group and all the members of the group for the work done.

3.7 The Committee then considered document MEPC 65/3/2 (Japan), commenting on the report of the correspondence group and claiming that the establishment of two different sets of threshold values for new and existing ships was inappropriate. Moreover, the Committee noted the arguments put forward by Japan in support of a threshold value for asbestos of 0.1 per cent, and "no threshold value" for ozone-depleting substances. Japan also proposed text for inclusion in the Inventory Guidelines to prohibit the retroactive application of new threshold values to existing IHMs.

3.8 Thereafter, the Committee considered document MEPC 65/3/3 (China) arguing in favour of a threshold level for asbestos of 1 per cent in line with ISO 30007:2010.

3.9 Following some discussion, it was agreed that the two proposed threshold values for asbestos and the other comments on the report of the correspondence group made in document MEPC 65/3/2, should be further discussed in the Working Group on Ship Recycling, if established.

Proposed amendments to the Inspection Guidelines

3.10 In introducing document MEPC 65/3/1 (Spain), the delegation of Spain brought the attention of the Committee to alleged inconsistencies in the *2012 Guidelines for the Inspection of Ships under the Hong Kong Convention* regarding the inspection of the Inventory of Hazardous Materials by port State control officers and the determination of "clear grounds" for a more detailed inspection, and proposed amendments to the relevant paragraphs of the guidelines. The delegation of Spain also suggested replacing the word "inspection" with the more explicit term "port State control" in the current title of the guidelines to avoid any confusion.

3.11 The majority of the delegations who spoke did not favour the proposals made in document MEPC 65/3/1, and it was agreed to instruct the Working Group on Ship Recycling, if established, to conclude the discussion and provide a recommendation to plenary for its consideration.

Progress of ratification

3.12 The Committee welcomed a statement made by the delegation of Norway informing the Committee that the Norwegian Parliament is expected to give its approval, on 14 May 2013, to the planned Norwegian accession to the Hong Kong Convention.

Establishment of the Working Group on Ship Recycling

3.13 Having considered the above issues, the Committee established the Working Group on Ship Recycling under the chairmanship of Ms. Kristine Gilson (United States) with the following terms of reference:

"Taking into account comments, proposals and decisions made in plenary, the Working Group on Ship Recycling is instructed to:

- .1 further develop the threshold values and consider, if appropriate, any exemptions applicable to the materials to be listed in Inventories of Hazardous Materials and consider the need to amend the *2011 Guidelines for the Development of the Inventory of Hazardous Materials* accordingly;
- .2 consider the issues raised in document MEPC 65/3/1 submitted by Spain further and provide a recommendation to the plenary for its consideration, taking into account that the majority of those who spoke did not favour the proposals;
- .3 consider and recommend whether the intersessional Correspondence Group on Ship Recycling should be re-established to further address threshold values and exemptions; and if so, develop draft terms of reference for the group; and
- .4 submit a written report to plenary on Thursday, 16 May 2013."

Report of the Working Group on Ship Recycling

3.14 The Committee considered and approved the report of the working group (MEPC 65/WP.8) in general and, in particular:

- .1 noted the group's recommendation that the *2012 Guidelines for the Inspection of Ships under the Hong Kong Convention* should not be amended as proposed in document MEPC 65/3/1;
- .2 noted the outcome of the group's deliberations on the further development of threshold values and exemptions applicable to the materials that are to be listed in Inventories of Hazardous Materials (paragraphs 7 to 24); and noted the group's recommendation that the *2011 Guidelines for the Development of the Inventory of Hazardous Materials* should be amended accordingly.

In considering this action item, some delegations raised concern as to the compromise taken in relation to the threshold value for asbestos under the Inventory Guidelines, noting at the same time, however, that the issue would be given further consideration by the Maritime Safety Committee;

- .3 instructed the Secretariat to liaise with the International Atomic Energy Agency (IAEA) to seek guidance on the threshold value for radioactive substances, with a view to facilitating further consideration of the issue at a future session of the MEPC;
- .4 invited the Maritime Safety Committee at its ninety-second session to give consideration to a threshold value for asbestos in view of its expertise on the matter; and
- .5 agreed to the re-establishment of the intersessional Correspondence Group on Ship Recycling, under the coordination of the United States¹, and approved the terms of reference for the group as follows:

"On the basis of the outcome of MEPC 65 and the report of the working group (MEPC 65/WP.8), the Correspondence Group on Ship Recycling is instructed to:

- .1 finalize the development of threshold values and exemptions applicable to the materials to be listed in Inventories of Hazardous Materials and amend accordingly the *2011 Guidelines for the Development of the Inventory of Hazardous Materials*; and
- .2 report the outcome of its deliberations to MEPC 66."

¹

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3.15 The Committee thanked the Chairman and the members of the group for their hard work.

4 AIR POLLUTION AND ENERGY EFFICIENCY

4.1 The Committee agreed to consider, in addition to the documents submitted under agenda item 4, document MEPC 65/7/4 concerning IACS unified interpretation MPC 103 on identical replacement engines. The Committee also agreed to consider relevant items from the outcome of the seventeenth session of the BLG Sub-Committee (MEPC 65/11/2), with two relevant documents MEPC 65/11/3 and MEPC 65/11/4, as well as relevant items from the outcome of the fifty-seventh session of the DE Sub-Committee (MEPC 65/11/8).

Order of discussion

4.2 The Committee considered the various issues in the following order:

Draft MEPC resolution

- .1 Draft MEPC resolution on *Promotion of technical co-operation and transfer of technology relating to the improvement of energy efficiency of ships*;

Air pollution from ships

- .2 Outcome of BLG 17 and DE 57:
 - .1 Impact on the Arctic of emissions of black carbon;
 - .2 Equivalents set forth in regulation 4 of MARPOL Annex VI;
 - .3 Amendments to NO_x Technical Code 2008 to certify dual-fuel engines;
 - .4 Regulation 13.2.2 – Replacement of marine diesel engines; and
 - .5 Revision of the Standard specification for shipboard incinerators;
- .3 Review of the status of the technological developments to implement Tier III NO_x standards;
- .4 Emissions of volatile organic compounds (VOC);
- .5 Treatment of ozone-depleting substances used to service ships;
- .6 Sulphur monitoring for 2012;
- .7 Feasibility study on LNG-fuelled short sea and coastal shipping;

Energy efficiency for ships

- .8 Outcome of DE 57 – Application of EEDI regulations to ships with a high-independent icebreaking capability;
- .9 Report of the Correspondence Group on energy efficiency measures for ships;

- .10 EEDI calculation for ro-ro cargo ships (vehicle carriers);
- .11 EEDI calculation for cruise passenger ships having non-conventional propulsion;
- .12 EEDI calculation for LNG carriers;
- .13 EEDI calculation for ro-ro cargo ships and ro-ro passenger ships;
- .14 Guidelines on the method of calculation of the attained EEDI for new ships;
- .15 Calculation of attained EEDI for ships defined in regulations 2.31 to 2.35;
- .16 Application of chapter 4 of MARPOL Annex VI to ships not propelled by mechanical means;
- .17 Speed trial and model test;
- .18 EEDI database;
- .19 IMO model course on energy efficient operation of ships;
- .20 Energy efficiency measures; and
- .21 Further measures to improve the energy efficiency standards of ships.

DRAFT MEPC RESOLUTION ON PROMOTION OF TECHNICAL CO-OPERATION AND TRANSFER OF TECHNOLOGY RELATING TO THE IMPROVEMENT OF ENERGY EFFICIENCY OF SHIPS

4.3 The Committee recalled that MEPC 62 had agreed that capacity-building, technical assistance and transfer of technology were important elements in a future comprehensive regulatory framework to promote energy efficiency in international shipping, and had included regulation 23 of MARPOL Annex VI on promotion of technical co-operation and transfer of technology relating to the improvement of energy efficiency of ships in the amendments adopted by resolution MEPC.203(62). MEPC 62 also agreed to develop an MEPC resolution on this matter (MEPC 62/24, paragraph 6.94).

4.4 The Committee further recalled that MEPC 64 had made significant progress with the finalization of the text and had developed a draft text, which included options for those paragraphs which had not been agreed upon. It was agreed that the text contained in the annex to document MEPC 64/WP.10 would be the Committee's interim agreement on the draft resolution, and that submissions on this issue to MEPC 65 should be restricted to comments relating to the specific paragraphs of the draft resolution. It was further agreed that the Working Group should be re-established at MEPC 65 with the same terms of reference, in order to finalize the text of the draft resolution at this session, with a view to its adoption.

4.5 The Committee considered the following documents relating to the draft MEPC resolution: MEPC 65/4/1 (Secretariat), MEPC 65/4/25 (Russian Federation) and MEPC 65/4/33 (South Africa).

4.6 The Committee agreed to forward all documents on the draft MEPC resolution to a dedicated working group, without general debate in Plenary, as a continuation of the Working Group established during the last session.

Establishment of Working Group on the draft resolution on promotion of technical co-operation and transfer of technology relating to the improvement of energy efficiency of ships

4.7 The Committee established the Working Group on the draft resolution on promotion of technical co-operation and transfer of technology relating to the improvement of energy efficiency of ships under the chairmanship of Mr. Arsenio Dominguez (Panama), with the following terms of reference:

"On the basis of document MEPC 65/4/1, MEPC 65/4/25 and MEPC 65/4/33, and taking into account any comments on the matter, the Working Group on the draft resolution on promotion of technical co-operation and transfer of technology relating to the improvement of energy efficiency of ships is instructed to:

- .1 finalize the text of the MEPC resolution with a view to adoption at this session of the Committee; and
- .2 submit a written report to plenary by Wednesday, 15 May 2013."

Outcome of the Working Group on the draft resolution on promotion of technical co-operation and transfer of technology relating to the improvement of energy efficiency of ships

4.8 The Committee received the report of the Working Group on the draft resolution on promotion of technical co-operation and transfer of technology relating to the improvement of energy efficiency of ships (MEPC 64/WP.9), and noted that it had been unable to agree on the text of the draft resolution.

Outcome of the Chairman's consultations

4.9 With a view to reaching an agreement on the draft MEPC resolution at this session, the Chairman of the Committee conducted informal consultations with a number of delegations.

4.10 The Committee noted that following these informal consultations, the Chairman had circulated a proposal for a final text of the draft MEPC resolution for consideration by the Committee. In introducing the outcome of the informal discussion, the Chairman of the Committee made a statement, as set out in annex 5. Following that, the Committee adopted, by acclamation, resolution MEPC.229(65) on *Promotion of technical co-operation and transfer of technology relating to the improvement of energy efficiency of ships*, as set out in annex 4.

4.11 Many delegations expressed their appreciation for the adoption of the MEPC resolution, and to the fact that in the spirit of cooperation and compromise, the Committee had been able to come to an agreement on this issue.

4.12 The delegations of Australia, Japan and the United States, supported by the delegation of Canada, made a joint statement. In addition, the United States made a further statement. As requested, the statements are set out in annex 5.

4.13 The delegations of Brazil, Canada, Chile, China (supported by Brazil); India, Nigeria, Norway, Peru, Saudi Arabia and Venezuela, made statements on the adoption of the MEPC resolution. Furthermore, a joint statement on the adoption of the MEPC resolution was made by the delegations of Denmark, the Netherlands and the United Kingdom (supported by Cyprus, Germany, Italy, Latvia, Malta, New Zealand, Poland, Spain and Sweden). As requested, the statements are set out in annex 5.

4.14 The Committee noted an intervention by the delegation of Argentina, supported by others, that for the term "enshrined" used in the preamble of the English version of the MEPC resolution, the translation in Spanish should be "consagrados". As requested, the statement is set out in annex 5.

4.15 The Committee further noted an intervention by the delegation of Sweden who pledged a donation to support the implementation of the Organization's technical assistance activities under regulation 23 of MARPOL Annex VI.

4.16 The Secretary-General offered his congratulations and appreciation to the Committee on adopting the MEPC resolution in the IMO spirit of cooperation. In particular, the Secretary-General noted the hard work by the Chairman and Vice-Chairman in negotiating this text and assured the Committee that the Secretariat would do its utmost to support the implementation of the MEPC resolution.

AIR POLLUTION FROM SHIPS

Outcome of BLG 17 and DE 57

4.17 The Committee noted that BLG 17 had considered the impact on the Arctic of emissions of black carbon from international shipping and had further considered guidelines and guidance documents as a consequence of the amended MARPOL Annex VI and the NO_x Technical Code 2008 (BLG 17/18, paragraphs 10 and 11).

4.18 The Committee also noted that DE 57 had considered revision of the Standard specification for shipboard incinerators, black carbon emissions from shipping in polar waters and application of EEDI regulations to ships with a high-independent icebreaking capability (DE 57/25, paragraphs 4, 11.19 to 11.21 and 11.25 to 11.27).

Impact on the Arctic of emissions of black carbon

4.19 The Committee recalled that MEPC 62 had agreed to a work plan for the BLG Sub-Committee to consider the impact on the Arctic of emissions of black carbon from international shipping (MEPC 62/24, paragraph 4.20). Following the recommendation of BLG 16 (BLG 16/16, paragraph 15.7), MEPC 63 had agreed to establish a separate agenda item on this matter at BLG 17 (MEPC 63/23, paragraph 19.4).

4.20 The Committee noted that BLG 17, in accordance with the work plan instructed by MEPC 62, had considered a definition for black carbon emissions from international shipping; measurement methods for black carbon; and possible control measures. BLG 17 agreed that more work would be needed on these matters and re-established a correspondence group on consideration of the impact on the Arctic of emissions of black carbon from international shipping.

4.21 The Committee considered document MEPC 65/4/22 (Norway), providing information on emissions of Black Carbon from shipping within the Arctic, as well as information on emissions from shipping north of 50° North.

4.22 The delegation of the Russian Federation made a statement on the outcome of the working group of the Arctic Council, as set out in annex 6.

4.23 The Committee taking into account that this matter will be considered at BLG 18, agreed to forward document MEPC 65/4/22 to BLG 18 for consideration.

4.24 The Committee considered relevant parts of document MEPC 65/11/4 (China), proposing that the Committee should instruct the BLG Sub-Committee to redefine its task and focus on the impact on the Arctic of black carbon emissions "from shipping in the Arctic" rather than "international shipping", as black carbon emissions are believed to have only regional ramifications, and shipping outside the Arctic will have little impact on this particular region. The statement by China is set out in annex 6.

4.25 The Committee recalled that MEPC 63 had reconsidered the title of the work plan for the BLG Sub-Committee and reconfirmed it was factual and correct. The Committee agreed to retain the title for the work plan, and noted that the outcome would be reported to a future session of the Committee for a decision.

4.26 The Committee recalled that DE 57 had considered document DE 57/11/20 (CSC, EOCI, WWF and Pacific Environment), supporting the inclusion of provisions in the Polar Code that recognize the importance of mitigating Black Carbon emissions from shipping in all polar waters to the maximum extent feasible, notwithstanding the outcome of relevant ongoing work in the MEPC and the BLG Sub-Committee.

4.27 The Committee also recalled that DE 57, having noted that this proposal went beyond the scope of the work currently being carried out by the BLG Sub-Committee but that, in any case, the outcome of their work should be awaited before considering the issue further, agreed to refer document DE 57/11/20 to the Committee for consideration and advice (DE 57/25, paragraph 11.21).

4.28 The Committee agreed that DE Sub-Committee should await the outcome of the BLG Sub-Committee's work on the impact on the Arctic of emissions of Black Carbon from international shipping.

Equivalents set forth in regulation 4 of MARPOL Annex VI

4.29 The Committee recalled that the Bahamas (MEPC.1/Circ.789 in September 2012) and Malta (MEPC.1/Circ.799 in December 2012) had notified the Organization that an alternative compliance method to be applied for selected cruise passenger ships operating in the North American Emission Control Area had been allowed in accordance with the provisions of regulation 4 "Equivalents" of MARPOL Annex VI, which had also been accepted by the United States and Canada.

4.30 The Committee noted that BLG 17 had considered draft guidelines on the assessment and approval of equivalent methods as permitted by MARPOL Annex VI, regulation 4, together with documents BLG 17/11/3 (United States) proposing to include emission-averaging schemes in the draft guidelines, and BLG 17/11/4 (CSC) commenting that emission-averaging schemes carry the potential risk of seriously weakening the integrity of MARPOL Annex VI.

4.31 The Committee also noted that BLG 17 had identified that the draft guidelines include specific issues pursuant to implementation of regulation 4 of MARPOL Annex VI as follows:

- .1 whether equivalent methods can be applied to a group of ships;
- .2 the role of the flag State and port States when approval of an alternative compliance method is under consideration; and
- .3 whether guidance should be generic or applicable to specific alternative compliance methods only, for example the *2009 Guidelines for Exhaust Gas Cleaning Systems* (resolution MEPC.184(59)).

4.32 The Committee further noted that BLG 17 had agreed that these specific issues should be forwarded to the MEPC for further consideration and to request further instructions, as appropriate (BLG 17/18, paragraph 11.24).

4.33 The Committee considered documents MEPC 65/11/3 (United States) providing comments on draft guidelines pertaining to equivalents set forth in regulation 4 of MARPOL Annex VI and not covered by other guidelines, and MEPC 65/11/4 (China) proposing to reject the use of emissions averaging schemes as equivalent methods for emission reductions under regulation 4 of MARPOL Annex VI, regardless of whether it is used for SO_x or NO_x on the basis of averaging emissions from a group of ships, as no substantial difference between the emissions averaging schemes and MBIs exist.

4.34 Several delegations were of the view that a sulphur emission averaging scheme is not a market-based measure, is limited in scope and should be a matter for littoral States to consider and decide upon so negating a need for its inclusion in guidelines pursuant to regulation 4 of MARPOL Annex VI. Other delegations in supporting this view considered the scheme provided flexibility without compromising environmental impact and that strict interpretation of the provisions was a matter for a Party to MARPOL Annex VI.

4.35 Other delegations were of the view that the interpretation of the applicability of the provisions of MARPOL should be limited to a ship, as set out in regulation 14 of MARPOL Annex VI, and not a group or fleet of ships, and that additional benefits resulting from ships going beyond the requirements could be lost with the averaging scheme. Further, one delegation considered the interpretation may contravene regulation 4.4 of MARPOL Annex VI by impairing the environment of another State and there is no provision that allows that State to accept such impairment. Another delegation considered the adoption of a scheme may lead to market distortion in that it would provide a commercial advantage to only those ships granted the equivalence.

4.36 Some delegations supported a proposal by one delegation to develop relevant information and administrative guidance for Parties that have designated an Emission Control Area, rather than include such a scheme in guidelines being developed pursuant to regulation 4 of MARPOL Annex VI.

4.37 The Committee agreed that sulphur emission-averaging schemes should not be accepted under regulation 4 of MARPOL Annex VI. The delegations of the Bahamas, Liberia, Malta and the United States reserved their position.

Amendments to NO_x Technical Code 2008 to certify dual-fuel engines

4.38 The Committee noted that BLG 17 had considered document BLG 17/11/1 (Japan and EUROMOT), proposing amendments to paragraphs 5.3, 5.12.3, 5.12.5, 6.3 and appendix 6 of the NO_x Technical Code 2008 in order to certify dual-fuel engines appropriately, and had agreed that the amendments to the NO_x Technical Code 2008 are necessary.

4.39 The Committee also noted that BLG 17 had developed draft amendments to NO_x Technical Code 2008 to certify dual-fuel engines as set out in annex 13 to document BLG 17/18 and agreed to forward the draft amendments to this session for approval, with a view to subsequent adoption (BLG 17/18, paragraph 11.51).

4.40 The Committee approved the draft amendments to NO_x Technical Code 2008, as set out in annex 7, for circulation, with a view to adoption at MEPC 66.

Regulation 13.2.2 – Replacement of marine diesel engines***Guidelines as required by regulation 13.2.2 of MARPOL Annex VI in respect of non-identical replacement engines not required to meet the Tier III limit***

4.41 The Committee recalled that regulation 13.2.2 of MARPOL Annex VI specifies that, for the replacement of a marine diesel engine with a non-identical marine diesel engine on or after 1 January 2016, if it is not possible for such a replacement engine to meet the Tier III standard set forth in paragraph 5.1.1 of this regulation, then that replacement engine shall meet the Tier II standard set forth in paragraph 4 of this regulation. Guidelines are to be developed by the Organization to set forth the criteria of when it is not possible for a replacement engine to meet the Tier III standard.

4.42 The Committee noted that BLG 17 had developed draft Guidelines as required by regulation 13.2.2 of MARPOL Annex VI in respect of non-identical replacement engines not required to meet the Tier III limit, as set out in annex 12 to BLG 17/18, with a view to adoption at this session.

4.43 The Committee adopted, by resolution MEPC.230 (65), 2013 Guidelines as required by regulation 13.2.2 of MARPOL Annex VI in respect of non-identical replacement engines not required to meet the Tier III limit, as set out in annex 8.

Unified interpretation on the time of replacement of an engine

4.44 The Committee noted that BLG 17 considered document BLG 17/14 (IACS), providing its unified interpretation UI MPC 98 relating to "time of the replacement or addition" of an engine for the applicable NO_x Tier standard for the supplement to the IAPP certificate, as referred to in regulation 13.2.2 of MARPOL Annex VI.

4.45 The Committee also noted that BLG 17 developed draft unified interpretation on the basis of IACS UI MPC 98 as set out in annex 14 to BLG 17/18, with a view to approval at this session.

4.46 The Committee approved the draft unified interpretation, as set out in annex 9, and requested the Secretariat to disseminate it as MEPC.1/Circ.812.

Unified interpretation on identical replacement engines

4.47 The Committee recalled that regulation 13.1.1.2 of MARPOL Annex VI specifies that an engine that undergoes a major conversion on or after 1 January 2000 must meet the emission standards in place at the time of the major conversion, except if the engine is replaced by an identical engine.

4.48 The Committee also recalled that BLG 16 had agreed to invite the observer from IACS to develop a unified interpretation for the definition of "identical" marine diesel engine as referred to in regulation 13.1.1.2 of MARPOL Annex VI (BLG 16/16, paragraph 8.35).

4.49 The Committee further recalled that BLG 17 had noted the information provided by the observer from IACS that the IACS unified interpretation on identical engines was available on its website and its intention to submit the unified interpretation to BLG 18 for consideration by the Sub-Committee (BLG 17/18, paragraph 11.45).

4.50 The Committee, having considered document MEPC 65/7/4 (IACS), providing its unified interpretation UI MPC 103 on "identical" replacement engines under regulation 13 of MARPOL Annex VI, approved the unified interpretation, as set out in annex 10 and instructed the Secretariat to disseminate it as MEPC.1/Circ.813.

Revision of the Standard Specification for Shipboard Incinerators

4.51 The Committee recalled that MEPC 64, having noted agreement at DE 57 that the capacity limit for shipboard incinerators should be increased from 1,500 kW to 4,000 kW, had approved MEPC.1/Circ.793 on type approval of shipboard incinerators.

4.52 The Committee noted that, while DE 57 completed its work on the Standard Specification for Shipboard Incinerators (resolution MEPC 76(40), as amended by resolution MEPC.93(45)), some delegations were of the view that this matter should be further considered and questioned the application of relevant sections to passenger and cruise ship only (DE 57/25, paragraph 4.4).

4.53 The Committee also noted that DE 57, having agreed to the need to update the definition section, as well as references to the MARPOL and SOLAS Conventions and IEC Standards in the standard specification for shipboard incinerators, had requested the Secretariat to update the aforementioned definitions and references, and submit a relevant document to MEPC 66 (DE 57/25, paragraph 4.5).

4.54 The Committee, in noting the above-mentioned outcome of DE 57 on the Standard Specification for Shipboard Incinerators, invited interested delegations to forward relevant information to the Secretariat to enable the Secretariat to prepare a document for submission to MEPC 66.

Review of the status of the technological developments to implement Tier III NO_x standards

4.55 The Committee recalled that regulation 13.10 of MARPOL Annex VI calls for a review of the status of technological developments to implement the Tier III NO_x emissions standards which began in 2012 and is to be completed no later than 2013, and that, following consideration and agreement of the Terms of Reference, MEPC 62 established a Correspondence Group on assessment of technological developments to implement the Tier III NO_x emission standards under MARPOL Annex VI to carry out this review (MEPC 62/24, paragraph 4.24).

4.56 The Committee considered documents MEPC 65/4/7 and MEPC 65/INF.10 (United States), providing final report of the correspondence group. The group identified that selective catalytic reduction (SCR), exhaust gas recirculation (EGR) and dual-fuel LNG have the potential to achieve Tier III NO_x limits, either alone or in some combination with each other. The group recommended that the effective date of the Tier III NO_x standards in regulation 13.5.1.1 of MARPOL Annex VI should be retained.

4.57 The Committee considered document MEPC 65/4/27 (Russian Federation), emphasizing that it should be necessary to move the effective date of MARPOL Annex VI, regulation 13, paragraph 5.1, at least five years back (1 January 2021), to carry out another review of the technologies before the effective date of the Tier III standards, by establishing the terms of reference for the review, which will take into account the criteria specified in paragraph 5 of document MEPC 65/4/27. Several delegations supported the proposal by the Russian Federation to amend the effective date. The following concerns with the proposed technologies to comply with the Tier III NO_x standards were identified:

- .1 use of Selective Catalytic Reduction (SCR) in combination with Exhaust Gas Cleaning Systems installed to enable equivalent compliance with the requirements under regulation 14 of MARPOL Annex VI in an Emission Control Area;
- .2 maintenance of the necessary temperature in the SCR reactor under variable loads experienced by ships especially when in port;
- .3 ammonia slip and generation of CO₂ emissions as part of the SCR chemical reaction and methane slip in gas engines may lead to an environmental impact that negates the benefit of reducing NO_x emissions;
- .4 supply of reductants (urea) and catalysts for SCR, and subsequent disposal of used catalysts;
- .5 cost of installation and operation of SCR;
- .6 safety implications for both SCR and use of gas as a fuel by ships other than gas carriers had not been properly considered;
- .7 only one manufacturer had an engine using Exhaust Gas Recirculation (EGR);
- .8 lack of infrastructure to supply gas as a fuel for ships; and
- .9 additional studies were required.

4.58 Several delegations were of the view, in supporting the recommendation of the Correspondence Group, that the effective date of implementation should be retained as 1 January 2016 for the reasons set out in the report of the Correspondence Group. Other delegations expressed the view that:

- .1 dual-fuel engines were being increasingly fitted to new ships to enable compliance with the requirements under regulation 14 of MARPOL Annex VI;
- .2 several hundred ships already had SCR fitted with considerable operational experience gained;

- .3 many of the points of concern raised for SCR had already been addressed by SCR equipment manufacturers;
- .4 use of gas as a fuel reduced CO₂ emissions by up to 20 per cent when compared to other fuels;
- .5 the matter of competitiveness of ports was for individual coastal States to consider; and
- .6 with over two and half years until the effective date, more work and development will be undertaken to address the other concerns expressed.

4.59 The Committee agreed to the proposal for the effective date to be amended to 1 January 2021. The following Member States reserved their position on the proposed amendment: Canada, Denmark, Finland, France, Germany, Italy, Japan, Norway, the United Kingdom and the United States.

4.60 The Committee agreed to the conclusion by the Correspondence Group that engines fuelled solely by gaseous fuels, e.g. pure LNG, should be required to comply with the provisions of regulation 13 of MARPOL Annex VI. In this regard, the Committee invited interested delegations to submit proposed draft amendments to MARPOL Annex VI for consideration by MEPC 66, with a view to approval.

4.61 The Committee noted that to enact the proposed amendments, it would need to adopt amendments to the provisions of MARPOL Annex VI. The Committee instructed the Secretariat to prepare the draft amendments, including any consequential amendments, for consideration by the Committee, with a view to approval at this session.

4.62 The Committee noted that as it had agreed to amend the effective date for the Tier III NO_x emission standard then the proposals set out in the documents relating to certain yachts used for recreational purposes: MEPC 65/4/8, MEPC 65/INF.15, (ICOMIA and SYBAss) and MEPC 65/4/32 (Marshall Islands, Cook Islands, ICOMIA and SYBAss), could be noted and agreed these documents should be held in abeyance. As requested, a statement made by the observer from ICOMIA is set out in annex 11.

4.63 The delegation of the United States expressed the view that as the North American Emission Control Area and United States Caribbean Sea Emission Control Area had already been designated for the control of NO_x emissions to the Tier III standard, and entered into force, the effective date of 1 January 2016 should be retained for those Emission Control Areas. Furthermore, the United States proposed an additional amendment that would provide for the agreed amendment of the effective date to 1 January 2021 to be applicable to any future ECA designated to control NO_x emissions to the Tier III standard, and also apply to certain categories of recreational yacht to address the concerns set out in document MEPC 65/4/32. As requested, the statement by the United States, supported by Belgium, Canada, Finland, France, the Republic of Korea and Sweden, is set out in annex 11.

4.64 Having considered the draft amendments prepared by the Secretariat (MEPC 65/WP.14), the Committee approved them, as set out in annex 12, for circulation, with a view to adoption at MEPC 66.

4.65 As requested, a statement by the observer from EUROMOT is set out in annex 11.

Emissions of volatile organic compounds (VOC)

4.66 The Committee recalled that regulation 15 of MARPOL Annex VI specifies that, if the emissions of VOCs from a tanker are to be regulated in a port or ports or terminal or terminals under the jurisdiction of a Party, they shall be regulated in accordance with the provisions of this regulation.

4.67 The Committee considered documents MEPC 65/4/20 (Norway) presenting the main mechanism for formation of volatile organic compounds (VOC) and estimates of global emissions, and MEPC 65/4/21 (Norway) proposing to consider improvements to IMO regime on the control of VOC emissions from ships.

4.68 Some delegations supported the proposal by Norway to consider improvements on the control of VOC emissions from ships. Other delegations expressed the view that they could not find any compelling need to commence the discussion on the VOC emission from ships at this stage.

4.69 The Committee agreed to continue to consider this matter at its next session and invited interested delegations to submit further proposals.

Treatment of ozone-depleting substances used to service ships

4.70 The Committee recalled that MEPC 64 had agreed to request the Secretariat to continue liaising with the Ozone Secretariat, and provide an update on the work of the Montreal Protocol of the treatment of ozone-depleting substances used by international shipping, for consideration at this session to facilitate the Committee's deliberation of this issue.

4.71 The Committee noted that, as reported in document MEPC 65/4/2 (the Secretariat), the twenty-fourth Meeting of the Parties to the Montreal Protocol was held in November 2012 and adopted its decision XXIV/9, in which no specific conclusion has been obtained, and this issue will be reconsidered at the thirty-third meeting of the Open-ended Working Group to be held in June 2013.

4.72 The Committee noted the information provided and requested the Secretariat to continue liaising with the Ozone Secretariat, and provide an update on the work of the Montreal Protocol, for consideration at its next session to facilitate the Committee's deliberation of this issue.

Sulphur monitoring for 2012

4.73 The Committee recalled that, in accordance with regulation 14.2 of MARPOL Annex VI and the *2010 Guidelines for monitoring the worldwide average sulphur content of fuel oils supplied for use on board ships* (resolution MEPC.192(61)), the results of sulphur monitoring should be presented to a subsequent session of the Committee every year (MEPC 65).

4.74 The Committee noted the information provided in document MEPC 65/4/9 (Secretariat), on the outcome of the monitoring of the worldwide average sulphur content of marine fuel oils supplied for use on board ship through 2012, which shows the average sulphur content of residual fuel oil (2.51%) and distillate fuel oil (0.14%) for 2012.

Feasibility study on LNG-fuelled short sea and coastal shipping

4.75 The Committee noted document MEPC 65/INF.4 (Secretariat), providing the final report of a Feasibility Study on Liquefied Natural Gas (LNG) Fuelled Short Sea and Coastal Shipping in the Wider Caribbean Region.

ENERGY EFFICIENCY FOR SHIPS

4.76 The Committee noted that amendments to MARPOL Annex VI incorporating a new chapter 4 on regulation of energy efficiency for ships, which makes the EEDI mandatory for new ships and the SEEMP for all (new and existing) ships, entered into force on 1 January 2013.

4.77 The Committee also noted that Member States that are non-Parties to the amended MARPOL Annex VI cannot issue the International Energy Efficiency Certificate (IEEC); however, a "Statement of Voluntary Compliance" is an acceptable approach before a country becomes a Party to the amended MARPOL Annex VI if their ships are fully compliant with the requirements. This is recognised within the shipping industry and by both flag States and enforcement authorities.

Outcome of DE 57 – Application of EEDI regulations to ships with a high-independent icebreaking capability

4.78 The Committee recalled that DE 57 had considered documents DE 57/11/8 (Finland and Sweden) and DE 57/11/16 (Canada), showing the result of an analysis that recent higher ice-class cargo ship designs have considerably more installed power than will be permissible in future under the EEDI regulations. DE 57 recognized the need to consider the possible development of correction coefficients or the possible exemption of ice class A ships from the EEDI requirements, taking into account the relatively small number of such ships (DE 57/25, paragraphs 11.25 and 11.26).

4.79 The Committee noted that DE 57 had agreed to ask the Committee for advice on the issue of the application of EEDI regulations to ships with a high-independent icebreaking capability (DE 57/25, paragraph 11.27).

4.80 The delegation of Finland, supported by Canada, expressed the view that the current EEDI regulations would prevent the construction of new cargo ships having ice-breaking capability in the future, i.e. category A ships with ice breaking capability of about 1.0m level ice or more, even if the current ice-class correction factors in the EEDI framework are used. Since the number of ice-breaking ships is rather small and they are expensive to build, compared with ships without independent ice-going capability, any of the solutions proposed in document DE 57/11/8 would not impact the effective implementation of the EEDI regulations.

4.81 The Committee agreed to exempt cargo ships having ice-breaking capability from the EEDI requirements, and instructed the Working Group to develop a draft amendment to MARPOL Annex VI with a view to approval at this session.

Report of the correspondence group on energy efficiency measures for ships

4.82 The Committee recalled that MEPC 64, recognizing the compelling need to develop various guidelines as soon as possible, had established an intersessional Correspondence Group on Energy Efficiency Measures for Ships, under the coordination of Japan.

4.83 The Committee considered documents MEPC 65/4/3 and MEPC 65/INF.20 (Japan), providing a report of the Correspondence Group on Energy Efficiency Measures for Ships. The correspondence group further developed a draft 2013 interim minimum power Guidelines with some options and square brackets (annex 1), a draft Guidance on treatment of innovative energy efficiency technologies for calculation and verification of the attained EEDI with some square brackets (annex 2), and the revised version of the draft f_w Guidelines (annex 3).

Draft 2013 Interim Guidelines for determining minimum propulsion power to maintain the manoeuvrability of ships in adverse conditions

4.84 The Committee recalled that MEPC 64 had approved a draft MEPC-MSC Circular for the *Interim Guidelines for determining minimum propulsion power to maintain the manoeuvrability of ships in adverse conditions*, subject to concurrent decision by MSC 91. After MEPC 64, the Chairman of the Working Group submitted document MEPC 65/4 on the second part of the report of the Working Group, which included a set of proposed numbers in table 1 of the draft MSC-MEPC circular.

4.85 The Committee also recalled that MSC 91, in November 2012, had approved the *Interim Guidelines for determining minimum propulsion power to maintain the manoeuvrability of ships in adverse conditions*, as MSC-MEPC.2/Circ.11 (MEPC 65/12/2, paragraph 2.1).

4.86 The Committee noted that the correspondence group established by MEPC 64 agreed that the definition of "smaller vessel" and "adverse condition" needed to be considered further, and therefore, agreed to insert some options for the definition of adverse conditions in square brackets for consideration at this session.

4.87 The Committee agreed to forward document MEPC 65/4/28 (Denmark and Japan) and the draft 2013 interim Guidelines set out in annex 1 to document MEPC 65/4/3 to the Working Group for further consideration.

Draft 2013 Guidance on treatment of innovative energy efficiency technologies for calculation and verification of the attained EEDI

4.88 The Committee noted that the correspondence group further developed draft 2013 Guidance on treatment of innovative energy efficiency technologies for calculation and verification of the attained EEDI, however, the draft Guidance set out in annex 2 to document MEPC 65/4/3 still had square brackets in paragraph 1.5 on future revision of the Guidance and paragraph 5 on average weighted value.

4.89 The Committee agreed that the draft 2013 Guidance set out in annex 2 to document MEPC 65/4/3 be forwarded to the working group for further consideration.

Draft 2013 Guidelines for the calculation of the coefficient f_w for decrease in ship speed in a representative sea condition

4.90 The Committee recalled that MEPC 64 had approved interim Guidelines for the calculation of the coefficient f_w for decrease in ship speed in a representative sea condition for trial use (MEPC.1/Circ.796).

4.91 The Committee noted that the correspondence group further developed draft 2013 Guidelines for the calculation of the coefficient f_w for decrease in ship speed in a representative sea condition, however, substantial amendments were not made as sufficient data/information was not submitted to the Group.

4.92 The Committee agreed to forward documents MEPC 65/4/11 and MEPC 65/INF.21 (China) and MEPC 65/4/29 (Japan), as well as draft 2013 Guidelines as set out in annex 3 to document MEPC 65/4/3, to the Working Group for further consideration.

EEDI calculation for ro-ro cargo ships (vehicle carriers)

4.93 The Committee recalled that the Working Group at MEPC 64 had agreed to consider further documents MEPC 64/4/6 and MEPC 64/4/25 (Denmark, Japan, Norway and WSC), proposing EEDI calculation method for ro-ro cargo ships (vehicle carriers) at this session to finalize the draft amendment to regulation 21 of Chapter 4 of MARPOL Annex VI and related Guidelines (MEPC 64/WP.11, paragraph 12.4).

4.94 The Committee agreed to instruct the Working Group to continue considering the EEDI calculation method for ro-ro cargo ships (vehicle carriers), using documents MEPC 64/4/6 and MEPC 64/4/25 as a basis.

EEDI calculation for cruise passenger ships having non-conventional propulsion

4.95 The Committee recalled that the Working Group at MEPC 64 had agreed to consider further documents MEPC 64/4/19 and MEPC 64/4/34 (CLIA), proposing an EEDI calculation method for cruise passenger ships having non-conventional propulsion at this session (MEPC 64/WP.11, paragraphs 12.11 to 12.13).

4.96 The Committee agreed to forward document MEPC 65/4/6 (CLIA) to the working group and instructed it to consider this matter further at this session.

EEDI calculation for LNG carriers

4.97 The Committee recalled that the Working Group at MEPC 64 supported, in principle, to have separate reference lines for LNG carriers and gas tankers other than LNG carriers, and considered the inclusion of both direct drive diesel and non-conventional propulsion systems (MEPC 64/WP.11, paragraphs 12.15 to 12.17).

4.98 The Committee agreed that documents MEPC 65/4/12 (Republic of Korea) and MEPC 65/4/13 (Denmark, Japan, Liberia and SIGTTO) be forwarded to the Working Group for further consideration.

EEDI calculation for ro-ro cargo ships and ro-ro passenger ships

4.99 The Committee recalled that the Working Group at MEPC 64 supported in principal the proposal as outlined in document MEPC 64/4/14 (Germany, Sweden and CESA) with regard to the correction factors for use in calculation of the attained EEDI and method of calculation of reference line for ro-ro passenger ships and ro-ro cargo ships other than vehicle carriers, and agreed to finalize draft amendments to regulation 21 of MARPOL Annex VI at this session in accordance with the work plan. The Working Group invited interested delegations to further refine the proposal (MEPC 64/WP.11, paragraph 12.6).

4.100 The Committee considered document MEPC 65/4/4 (Germany, Sweden, CESA and INTERFERRY), providing fine-tuning of the proposal for the inclusion of ro-ro cargo and ro-ro passenger ship types into the EEDI framework.

4.101 The Committee considered document MEPC 65/4/18 (Denmark and Japan), proposing to reconsider the decision taken at MEPC 64 to use the EEDI calculation method for ro-ro passenger and ro-ro cargo ships set out in MEPC 64/4/14 (Germany, Sweden and CESA) as the basis for future consideration. The co-sponsors also proposed to use the EEDI calculation method for ro-ro passenger and ro-ro cargo ships set out in document MEPC 64/4/9 (Denmark, Japan and Norway).

4.102 Some delegations expressed the view that the correction factor f_{JRoRo} proposed in document MEPC 65/4/4 could lead to ship designs with more power but a lower EEDI and so is against the fundamental principle of the EEDI and that a correction factor depending on the ship's speed should not be included in the attained EEDI formula.

4.103 The majority supported the EEDI calculation method for ro-ro passenger and ro-ro cargo ships proposed in document MEPC 65/4/4 and consequently, the Committee instructed the Working Group to finalize the calculation method with a view to adoption at this session.

Guidelines on the method of calculation of the attained EEDI for new ships

Correction factor for general cargo ships

4.104 The Committee recalled that the Working Group at MEPC 64 supported, in principle, documents MEPC 64/4/18 and MEPC 64/INF.9 (Netherlands) proposing three correction factors to enable a more consistent comparison of the wide variety of individual types of ships within the general cargo ships smaller than 20,000 DWT, and agreed to continue considering the measures for general cargo ships with a view to finalization at this session (MEPC 64/WP.11, paragraph 12.22).

4.105 The Committee considered documents MEPC 65/4/5 and MEPC 65/INF.8 (Netherlands) proposing to include three correction factors in the EEDI calculation guidelines to overcome the challenges in indexing of ships which fall under the requirements for general cargo ships smaller than 20,000 DWT.

4.106 Some delegations were of the view that a correction factor f_j for general cargo ships proposed in document MEPC 65/4/5 would be against fundamental principle of the EEDI, while the majority of delegations supported the inclusion of the three correction factors proposed in document MEPC 65/4/5.

4.107 The Committee instructed the Working Group to finalize correction factors for general cargo ships based on the proposal in document MEPC 65/4/5.

Correction factor for shallow-draft cargo ships

4.108 The Committee considered document MEPC 65/4/17 (Greece) proposing that an appropriate correction factor should be included in the EEDI calculation for shallow-draft cargo ships with L/B and B/T ratios outside a prescribed range in order to relax unfavourable EEDI penalties on these ships.

4.109 The Committee noted the information provided by the delegation of Greece and invited interested delegations to submit concrete proposals for an appropriate correction factor for shallow-draft cargo ships to a future session.

Ships with dual-fuel engines

4.110 The Committee instructed the Working Group to review document MEPC 65/4/5 (China), emphasizing that the requirements for EEDI calculation and verification for ships with dual-fuel engines are uncertain and need to be clarified for uniform understanding and application of the EEDI.

Calculation of attained EEDI for ships defined in regulations 2.32 to 2.35

4.111 The Committee considered document MEPC 65/4/24 (Germany), seeking clarification on the legal compulsion to calculate an attained EEDI for ship type mentioned in regulations 2.32 to 2.35, taking into account that an exact way for the attained EEDI calculation has not yet been established for them. The delegation of Germany proposed to refrain from attained EEDI calculation for ship types that are not yet fully covered by the 2012 EEDI calculation Guidelines until these Guidelines would be amended to cover these ship types.

4.112 The Committee noted the difficult position for those seeking to calculate the attained EEDI for ships types that calculation methods of the attained EEDI and the reference lines were still to be developed. The Committee agreed that this matter should be further considered after obtaining the outcome of such developments at this session.

Application of chapter 4 of MARPOL Annex VI to ships not propelled by mechanical means

4.113 The Committee recalled that MEPC 64 had approved the unified interpretation of the application of SEEMP to platforms and drilling rigs by MEPC.1/Circ.795, in which platforms (including FPSOs and FSUs) and drilling rigs regardless of their propulsion, are excluded from ships required to keep on board a SEEMP.

4.114 The Committee also recalled that, while considering the above unified interpretation, the Working Group, at MEPC 64, had noted that it would be necessary to amend regulation 19 of MARPOL Annex VI to identify that the requirements under chapter 4 of MARPOL Annex VI do not apply to platforms and drilling rigs (MEPC 64/WP.11, paragraph 5.6).

4.115 The Committee considered document MEPC 65/4/14 (IACS), highlighting that ships without any propulsion units/generators or any other power driven device on board (e.g. deck cargo barges) would not need to be provided with a SEEMP and, as a consequence, no IEE Certificate needs to be issued. The observer from IACS sought clarification whether non self-propelled barges, which are fitted with a generator and/or pump engines (e.g. tank barges), should also not be required to keep a SEEMP on board and not be issued with an IEEC as MEPC 64 had decided that FPSOs/FSUs/MODUs would not need to keep on board a SEEMP. The observer from IACS proposed to develop a unified interpretation on this matter.

4.116 The Committee considered document MEPC 65/4/16 (Norway), proposing to amend regulation 19 of MARPOL Annex VI to specify that the provisions of chapter 4 shall not apply to ships not propelled by mechanical means, such as platforms, drilling rigs and barges, etc.

4.117 The delegation of the Republic of Korea highlighted that it submitted document MEPC 64/7/6 proposing to identify unmanned and non-self-propelled barges and to develop a method to exempt survey and certification requirements relating to each annex of MARPOL Convention for such ships, which will be further considered by the FSI Sub-Committee.

4.118 The Committee agreed to develop amendments to regulation 19 of MARPOL Annex VI based on document MEPC 65/4/46 as well as a unified interpretation based on document MEPC 65/4/14 as such unified interpretation would be necessary until the entry into force of the said amendments to regulation 19, and instructed the Working Group to develop them at this session.

Speed trial and model test

4.119 The Committee recalled that the Working Group, at MEPC 64, had noted that the revised ITTC method for analysis of speed standard in document MEPC 64/INF.6 (ITTC) contained one method only (direct power method), and the correction method for sea current stated in document MEPC 64/4/15, paragraph 3.5 (ITTC) is not included in document MEPC 64/INF.6 (MEPC 64/WP.11, paragraph 11.3).

4.120 The Committee also recalled that the Working Group, at MEPC 64, had agreed to invite ISO to revise, as soon as possible, ISO 15016:2002, taking into account documents MEPC 64/4/15 and MEPC 64/INF.6 (MEPC 64/WP.11, paragraph 11.4).

4.121 The Committee agreed to forward documents MEPC 65/4/15 (Republic of Korea), MEPC 65/4/23 (ISO), MEPC 65/4/26 (Norway) and MEPC 65/INF.7 (ITTC) to the Working Group and instructed the Group to consider this matter further at this session.

EEDI database

4.122 The Committee considered document MEPC 65/4/31 (IACS), proposing the development of an "EEDI database" in order to support the reviews of the implementation of the EEDI provisions as detailed in regulation 21.6 of MARPOL Annex VI. The observer from IACS highlighted the challenges that would need to be addressed, and proposed a dataset that would be used to populate the database, as well as how the database could be administered and managed.

4.123 Several delegations supported the establishment of the database in principle, but expressed concern about the protection of the intellectual property rights and commercially sensitive information. Some delegations were of the view that, due to the confidentiality of the information, the database should not be established by any commercial entities. Other delegations were of the view that if the database was established under the management of the Secretariat, this might increase the administrative burden and additional cost of the Secretariat, whilst the Organization was considering how to reduce the cost of the Secretariat.

4.124 The observer from IACS confirmed its willingness to participate in the submission of the specified data to populate such a database at no cost to the Organization, unless otherwise instructed by the Administration.

4.125 The Committee, in noting the obligation on the Organization to undertake a review in phases 1 and 2 of the EEDI, agreed to continue discussion on this matter at its next session, and invited interested delegations to submit documents.

IMO model course on energy efficiency operation of ships

4.126 The Committee recalled that MEPC 64 had agreed to request the Secretariat to forward a draft IMO Model Course on energy-efficient operation of ships to a validation group for Model Courses under the STCW Convention to review and provide comments (MEPC 64/23, paragraph 4.89).

4.127 The Committee noted that the validation group for Model Courses under the STCW Convention had provided comments on the draft IMO Model Course. Taking into account these comments from the validation group, the Secretariat adjusted the draft Model Course by adding some paragraphs in the relevant sections, as set out in the annex to document MEPC 65/INF.17.

4.128 The Committee noted the updated version of the draft IMO Model Course and instructed the Secretariat to publish it as a final version of IMO Model Course on energy-efficient operation of ships.

Energy efficiency measures

4.129 The Committee noted document MEPC 65/INF.23 (Canada), providing information on energy generating devices fuelled by shipboard waste that have better emissions than conventional incinerators and are designed to be acceptable for use in port.

Establishment of Working Group on Air Pollution and Energy Efficiency

4.130 The Committee established the Working Group on Air Pollution and Energy Efficiency, under the Chairmanship of Mr. Koichi Yoshida (Japan), with the following terms of reference:

"Taking into account relevant documents as well as comments and decisions made in plenary, the Working Group on Air Pollution and Energy Efficiency is instructed to:

- .1 develop draft amendments to MARPOL Annex VI for exemption of cargo ships having ice-breaking capability from chapter 4 of MARPOL Annex VI;
- .2 further develop and, if possible, finalize the draft 2013 Interim Guidelines for determining minimum propulsion power to maintain the manoeuvrability of ships in adverse conditions, using annex 1 to document MEPC 65/4/3 as a basis;
- .3 further develop and, if possible, finalize the draft 2013 Guidance on treatment of innovative energy efficiency technologies for calculation and verification of the attained EEDI, using annex 2 to document MEPC 65/4/3 as a basis;
- .4 further develop and, if possible, finalize the draft 2013 Guidelines for the calculation of the coefficient f_w for decrease in ship speed in a representative sea condition, using annex 3 to document MEPC 65/4/3 as a basis;
- .5 finalize the EEDI calculation method for ro-ro cargo ships (vehicle carriers) and the draft amendments to MARPOL Annex VI, using documents MEPC 64/4/6 and MEPC 64/4/25 as a basis, for approval at this session;

- .6 finalize the EEDI calculation method for cruise passenger ships having non-conventional propulsion and the draft amendments to MARPOL Annex VI, using documents MEPC 64/4/19, MEPC 64/4/34 and MEPC 65/4/6 as a basis;
- .7 further develop the EEDI calculation method for LNG carriers and the draft amendments to MARPOL Annex VI, using documents MEPC 64/4/26, MEPC 65/4/12 and MEPC 65/4/13 as a basis;
- .8 finalize the EEDI calculation method for ro-ro cargo and ro-ro passenger ships using document MEPC 65/4/4 as a basis, for approval at this session;
- .9 review and finalize correction factors for general cargo ships using document MEPC 65/4/5 as a basis, for approval at this session;
- .10 review document MEPC 65/4/10 on EEDI calculation and verification for ships with dual-fuel engines;
- .11 develop draft amendments to regulation 19 and unified interpretation MEPC.1/Circ.795 to specify that the provisions of chapter 4 of MARPOL Annex VI shall not apply to ships not propelled by mechanical means using documents MEPC 65/4/14 and MEPC 65/4/16 as a basis;
- .12 review documents MEPC 65/4/15, MEPC 65/4/23, MEPC 65/4/26 and MEPC 65/INF.7 on speed trial and model test; and
- .13 submit a written report to plenary on Friday, 17 May 2013."

Outcome of the Working Group on Air Pollution and Energy Efficiency

4.131 The Committee received the report of the Working Group on Air Pollution and Energy Efficiency (MEPC 65/WP.10). In his introduction of the report, the Chairman of the Working Group, Mr. Koichi Yoshida (Japan), emphasized that the Working Group had:

- .1 prepared draft amendments to chapter 4 of MARPOL Annex VI, for approval at this session with a view to adoption at the next session, that extend the provisions under regulation 21 on "Required EEDI" to the following ship types: cruise passenger ships having non-conventional propulsion, ro-ro cargo and ro-ro passenger ships, ro-ro (vehicle carriers) and LNG carriers;
- .2 finalized, for adoption at the next session, amendments to the EEDI calculation Guidelines for, respectively, cruise passenger ships having non-conventional propulsion, ro-ro cargo and ro-ro passenger ships, LNG carriers and to include correction factors for general cargo ships;
- .3 finalized, for adoption at this session, amendments to resolution MEPC.215(63), *Guidelines for calculation of reference lines for use with the Energy Efficiency Design Index (EEDI)*;
- .4 finalized, for adoption at this session, the *2013 Interim Guidelines for determining minimum propulsion power to maintain the manoeuvrability of ships in adverse conditions*;

- .5 finalized, for approval at this session, the *2013 Guidance on treatment of innovative energy efficiency technologies for calculation and verification of the attained Energy Efficiency Design Index*;
- .6 finalized, for adoption at this session, amendments to resolution MEPC.214(63), the *2012 Guidelines on survey and certification of the energy efficiency design index (EEDI)*, as amended;
- .7 finalized, for adoption at this session, the *2013 Guidelines for calculation of reference lines for use with the Energy Efficiency Design Index (EEDI) for cruise passenger ships having non-conventional propulsion*;
- .8 agreed that the respective datasets used to calculate the reference lines for LNG carriers, ro-ro (vehicle carriers), ro-ro cargo, ro-ro passenger and cruise passenger ships having non-conventional propulsion should be submitted to the Secretariat for the purposes of transparency in accordance with the Guidelines for calculation of reference lines for use with EEDI; and
- .9 continued work in accordance with the work plan agreed at MEPC 63 and updated the work plan for approval at this session.

4.132 The Committee noted corrections to document MEPC 65/WP.10 as follows:

- .1 paragraph 11.3 is replaced by the following:

"11.3 The group noted that the original proposal to only apply the correction factors to general cargo ships of less than 20,000 DWT presented the risk of the design of "paragraph ships" and that further analysis had indicated that extension of the correction factor to the whole fleet would make minimal difference to the outcome."
- .2 in annex 1, paragraph 1, the definition of "Gas carrier" is replaced by the following:

"26 "Gas carrier" means a cargo ship, other than LNG carrier as defined in paragraph 38, constructed or adapted and used for the carriage in bulk of any liquefied gas."

4.133 The Committee also noted corrections to document MEPC 65/WP.10 as set out in document MEPC 65/WP.10/Corr.1 as follows:

- .1 in annex 1, paragraph 3*bis* is added to provide an amendment to regulation 20.1 as follows:
 - "1 The attained EEDI shall be calculated for:
 - .1 each new ship;
 - .2 each new ship which has undergone a major conversion; and

- .3 each new or existing ship which has undergone a major conversion, that is so extensive that the ship is regarded by the Administration as a newly constructed ship which falls into one or more of the categories in regulations 2.25 to 2.35, 2.38 and 2.39 of this annex. The attained EEDI shall be specific to each ship and shall indicate the estimated performance of the ship in terms of energy efficiency, and be accompanied by the EEDI Technical File that contains the information necessary for the calculation of the attained EEDI and that shows the process of calculation. The attained EEDI shall be verified, based on the EEDI Technical File, either by the Administration or by any organization duly authorized by it.*"; and
- .2 in annex 4, paragraph 6 of the Unified Interpretation, is replaced by the following:

"6 With respect to ships required to keep on board a SEEMP, such ships exclude platforms (including FPSOs and FSUs) and drilling rigs, regardless of their propulsion, and any other ship without means of propulsion."

Action taken on the report of the Working Group on Air Pollution and Energy Efficiency

4.134 In concluding its consideration of the report of the Working Group, the Committee approved it in general and, in particular:

- .1 approved the draft amendments to MARPOL Annex VI, as set out in annex 13, for circulation, with a view to adoption at MEPC 66;
- .2 noted the group had prepared amendments to resolution MEPC.212(63), the *2012 Guidelines on the method of calculation of the attained energy efficiency design index (EEDI) for new ships*, as amended, as set out in annex 2 to document MEPC 65/WP.10, with a view to finalization and adoption at MEPC 66;
- .3 adopted, by resolution MEPC.231(65), the *2013 Guidelines for calculation of reference lines for use with the energy efficiency design index (EEDI)*, as set out in annex 14;
- .4 approved the amendments to unified interpretation MEPC.1/Circ.795, as set out in annex 15, and instructed the Secretariat to disseminate it as MEPC.1/Circ.814;
- .5 adopted, by resolution MEPC.232(65), the *2013 Interim Guidelines for determining minimum propulsion power to maintain the manoeuvrability of ships in adverse conditions*, as set out in annex 16;
- .6 approved the *2013 Guidance on treatment of innovative energy efficiency technologies for calculation and verification of the attained EEDI*, and instructed the Secretariat to disseminate it as MEPC.1/Circ.815;

- .7 adopted, by resolution MEPC.233(65), the *2013 Guidelines for calculation of reference lines for use with the Energy Efficiency Design Index (EEDI) for cruise passenger ships having non-conventional propulsion*, as set out in annex 17;
- .8 adopted, by resolution MEPC.234(65), amendments to the *2012 Guidelines on survey and certification of the energy efficiency design index (EEDI)*, as amended, as set out in annex 18;
- .9 instructed the Secretariat to issue a consolidated text of the *2012 Guidelines on survey and certification of the energy efficiency design index (EEDI)*, as amended, which incorporates the amendment into the 2012 Guidelines and to disseminate it as MEPC.1/Circ.816;
- .10 noted the agreement of the Group for the respective datasets used to calculate the reference lines for LNG carriers, ro-ro (vehicle carriers), ro-ro cargo, ro-ro passenger and cruise passenger ships having non-conventional propulsion should be submitted to the Secretariat for the purposes of transparency in accordance with resolution MEPC.231(65), *Guidelines for calculation of reference lines for use with EEDI*; and
- .11 endorsed the work plan, as set out in annex 9 to document MEPC 65/WP.10.

4.135 The Committee thanked the Chairman, Mr. Yoshida, and members of the Group for their hard work.

Further measures to improve the energy efficiency of ships

4.136 The Committee had before it five documents on further measures to improve energy efficiency of international shipping.

4.137 The Committee recalled that MEPC 63 had invited further submissions on specific aspects of an IMO performance standard for fuel consumption measurement for ships (MEPC 63/23, paragraph 5.59).

4.138 The Committee also recalled that MEPC 64 had considered documents MEPC 64/5/6 and MEPC 64/5/7 (United States). Document MEPC 64/5/6 identified two major changes to the proposal in document MEPC 59/4/48 (United States), addressing GHG emissions by fostering improvements in ships' energy efficiency; first, the establishment of mandatory attained efficiency standards potentially using a metric based on fuel consumption; and secondly, the establishment of a phased approach: a data collection phase (Phase I); a pilot phase (Phase II); and a full implementation phase (Phase III). Document MEPC 64/5/7 provided a draft regulatory text for amendments to MARPOL Annex VI for Phases I and II of the revised proposal in MEPC 64/5/6.

4.139 The Committee further recalled that MEPC 64 had noted an intervention by the delegation of Norway highlighting that the proposal made by the United States in documents MEPC 64/5/6 and MEPC 64/5/7 is not, due to its technical nature, an MBM proposal, and therefore should be considered under agenda item 4 at future sessions (MEPC 64/23, paragraph 5.17).

4.140 The Committee considered the following documents under this item:

- .1 document MEPC 65/4/19 (United States), presenting a new version of its proposal for the establishment of attained energy efficiency standards for new and existing ships through a phased approach;
- .2 document MEPC 65/INF.3/Rev.1 (IMarEST), providing information relating to a goal-based approach to "fuel consumption measurement";
- .3 document MEPC 65/4/30 (Belgium, Canada, Denmark, Germany, Japan, Norway and United Kingdom) supporting the development of technical and operational measures to increase the energy efficiency of ships;
- .4 document MEPC 65/4/34 (CSC), providing comments on MEPC 65/4/19 (United States) and MEPC 65/INF.3/Rev.1 (IMarEST), and offering additional information on the different approaches to monitoring and reporting fuel consumption and CO₂ emissions from ships; and
- .5 document MEPC 65/4/35 (CSC), providing comments on MEPC 65/4/19 (United States) regarding "hours of operation" for transport work, measuring energy efficiency in terms of joules of energy, and data collection, submission and verification procedures.

4.141 Several delegations recognized the importance of enhancing energy efficiency and reducing fuel consumption with subsequent reductions of CO₂ emissions and other pollutants emitted to air and expressed the need to discuss the proposals submitted to the session further. Other delegations supported, in principle, the proposal by the United States and specifically the phased approach to implementation, and that the focus of initial work should be on data collection as a basis of future technical work. Some delegations identified the need for data collection to be systematic, practicable, cost-effective and require a low administrative burden for both the supplier and collector of the data.

4.142 Other delegations considered the implications of not limiting the consideration to data collection only and that further consideration should be given to the development of the options proposed in documents MEPC 65/4/19 and MEPC 65/4/30; and that this should be done on the basis of technical robustness, international agreement and consistency with measures that have already been adopted by the Organization. Any such scheme should have the simplicity and accuracy of monitoring efficiency using parameters that are readily and commonly available from the global fleet. In addition, the means to measure these parameters should be goal-based in order to improve over time, the accuracy of the information. In this regard, several delegations expressed the view that a correspondence group should be established to take forward the proposals before the next session.

4.143 One delegation was of the view that whilst they could support the development of the proposal by the United States, in principle, it would be on the basis of such a scheme being an alternative to an MBM for international shipping and not complementary. Another delegation also supported the proposal in principle but expressed their concern with extending the scheme to ships that had already complied with the EEDI requirements and that a compelling need would have to be demonstrated from the data collected.

4.144 Several delegations expressed the view that the adoption of the draft resolution on promotion of technical cooperation and transfer of technology relating to the improvement of energy efficiency of ships must be the priority for the Organization and that consideration of further measures must await the adoption of the resolution. Other delegations considered the

scheme needed to be technically credible and internationally acceptable and that the grading of ships could potentially adversely affect Member States' ability to trade and develop and so could be considered equivalent to an MBM that applied to all ships.

4.145 One delegation expressed the view that the UNFCCC already provides basic principles to determine monitoring, reporting and verification and that there is a clear distinction made in the reporting requirements for developed and developing countries. Further, the cost on the Organization and the cost-effectiveness needed to be investigated with a clear need and purpose identified for data collection. Other delegations expressed the view that the provisions for EEDI had only recently entered into force and so it was premature to consider further measures until the impact had been appropriately considered and as such did not support the establishment of a correspondence group.

4.146 The Committee noted that there was considerable support for the approach in the United States' proposal, as set out in document MEPC 65/4/19, especially for the data collection phase. The Committee also noted that some delegations were of the view that there was a need at this stage for more ideas and additional information. The delegation of Cyprus proposed further informal discussion intersessionally and requested interested delegations to contact Policy@dms.mcw.gov.cy.

4.147 The Committee agreed not to establish a correspondence group at this stage to respect the range of views expressed but agreed to establish a sub-item under agenda item 4 for discussion of further technical and operational measures for enhancing the energy efficiency of international shipping, and to establish a working group under this sub-agenda item at MEPC 66. In this regard the Committee invited further submissions on the proposals in documents MEPC 65/4/19 and MEPC 65/4/30, to its next session where the matter would be considered under agenda item 4.

5 REDUCTION OF GHG EMISSIONS FROM SHIPS

General

5.1 Based on a proposal by its Chairman, the Committee agreed to suspend discussions on Market-Based Measures and related issues to a future session except for this session the following three items will be considered:

- .1 Update of the GHG emission estimate for international shipping;
- .2 WTO-related matters; and
- .3 UNFCCC matters.

Update of the GHG emission estimate for international shipping

5.2 The Committee noted document MEPC 65/5/4 (CSC), drawing attention to a recent study that sets shipping (and aviation) emissions out to 2050 within the context of a global 2°C emissions reduction pathway. The observer from CSC believes this work represents further strong evidence highlighting the urgent need for IMO to take immediate action to reduce emissions of the world fleet with this critical timeline in mind, and urges MEPC 65 to agree, in particular, on the early adoption of immediate measures to address GHG emissions from existing ships so as to help preserve the chances of limiting global warming to no more than 2°C.

5.3 The Committee recalled that MEPC 63 noted that uncertainty exists in the estimates and projections of emissions from international shipping and agreed that further work should take place to provide the Committee with reliable and up-to-date information to base its decisions on and requested the Secretariat to investigate possibilities and report to future sessions (MEPC 63/23, paragraph 5.58).

5.4 The Committee also recalled that MEPC 64 had considered document MEPC 64/5/5 (Secretariat) containing a draft outline for an update of the GHG emissions estimate for international shipping providing, among others, methodological aspects and information on the work distribution (MEPC 64/23, paragraph 5.3).

5.5 The Committee further recalled that following a discussion, MEPC 64 had endorsed, in principle, the outline for an update of the GHG emissions estimate as set out in the annex to document MEPC 64/5/5, and had agreed that an Expert Workshop be held in 2013 to further consider the methodology and assumptions to be used in the update (MEPC 64/23, paragraph 5.6).

5.6 The Committee noted that the Expert Workshop on the update of GHG emissions estimate for international shipping (Update-EW) was held from 26 February to 1 March 2013 and its report is contained in document MEPC 65/5/2. In considering the report, the Committee noted: the good progress that was made by the Expert Workshop including its agreement that the primary focus of the Update Study should be to update the CO₂ emission estimates for international shipping; and its recommendation that, should there be adequate resources, then the additional substances that were estimated by the Second IMO GHG 2009 should also be estimated.

5.7 The Committee agreed to the terms of reference of the Update Study as set out in the annex to document MEPC 65/5/2, and:

- .1 that the Update Study should focus on global inventories as set out in paragraph 1.3 of the terms of reference and, resources permitting, should also include future scenarios of emissions as set out in the chapeau and paragraph 1.10;
- .2 that the primary focus of the Update Study should be to update the CO₂ emission estimates for international shipping, and that, should there be adequate resources, then the same substances as those estimated by the Second IMO GHG Study 2009 should also be estimated;
- .3 that a Steering Committee should be established and that it should be geographically balanced, equitably represent developing and developed countries and be of a manageable size. The Committee also agreed that the Steering Committee should be comprised of seven Member States, three from developing, three from developed countries and one Member State to chair the Steering Committee; and
- .4 to keep the timetable for delivering the Update Study as suggested by the Expert Workshop: 31 July 2013 for the procurement process and MEPC 66 (March 2014) as submission deadline for the final report of the Update Study.

5.8 With regard to paragraph 5.7.4 above, the Committee noted the view of some delegations that the timetable for delivering the Study within the tight deadlines might compromise the outcome and that finalization of the study should therefore be postponed to MEPC 68 in 2015 by which time the Fifth Assessment Report (AR5) of the Intergovernmental

Panel on Climate Change (IPCC) will have been published. Furthermore, some delegations expressed the view that delivery of the Update Study should be considered in the context of global emissions estimates and that there is a need to ensure a good quality, robust and credible outcome from the Update Study.

5.9 The Committee requested the Secretariat to finalize the terms of reference for the Update Study, including the agreed changes and any editorial amendments that may be needed, and that the terms of reference should be attached as an annex to the report of MEPC 65.

5.10 The Committee also requested the Secretariat to initiate the Update Study in accordance with the terms of reference, including establishment of the Steering Committee as agreed by the Committee, so that work could begin in 2013, with a view to the final report of the Update Study being submitted to MEPC 66, to be held in Spring 2014.

5.11 The Committee noted that an invitation for tendering for the Update Study will be posted on the IMO website and encouraged Member States to have this information conveyed to relevant national research institutes and universities, which, in their judgment, would be interested in bidding for the update.

5.12 The Committee thanked delegations for all financial and in-kind contributions made towards the Update Study, and invited Member States and observer organizations that have not already done so to contribute financially towards the Update Study so as to ensure timely delivery of this undertaking.

Action taken on the report of the Expert Workshop on the update of GHG emissions estimate for international shipping

5.13 In concluding its consideration of the report of the Expert Workshop, the Committee approved it in general and, in particular:

- .1 noted that the Expert Workshop completed, as far as possible, the mandate given to it by the Committee as outlined in paragraph 5.6 to document MEPC 64/23;
- .2 noted that the available data for use in approaches for estimating emissions have been improved and enhanced since 2007 and that, whilst there is still uncertainty, the improvements in data collection, methods and assumptions could increase confidence in the estimates derived;
- .3 endorsed the Expert Workshop's recommendation that the same top-down (fuel sales) and bottom-up (ship activity) approaches used in the Second IMO GHG Study 2009 be used in the Update Study;
- .4 approved the terms of reference for the Update Study, as set out in annex 19 to this report;
- .5 agreed that it is important that the emission estimates obtained by the Update Study should be viewed by the IMO Membership and external interested parties as the outcome of a method agreed; and
- .6 noted and expressed its appreciation to the international bodies and experts that provided, through seven presentations to the Expert Workshop, a comprehensive overview of the approaches for estimating emissions from international shipping, as listed in annex 2 to document MEPC 65/5/2.

5.14 The Committee thanked the Chairman of the Expert Workshop, Mr. Andreas Chrysostomou, experts and delegates attending the Expert Workshop, for their hard work.

Market-based Measures

5.15 The Committee, bearing in mind its agreement that discussion of Market-based Measures is suspended, noted the following new submissions to this session:

- .1 MEPC 65/5/3 (Republic of Korea);
- .2 MEPC 65/5/1 (IMarEST);
- .3 MEPC 65/INF.6 (Republic of Korea); and
- .4 MEPC 65/INF.18 (Secretary-General).

WTO-related issues

5.16 The Committee recalled that MEPC 63 agreed to continue the debate on the relation between an MBM for international shipping under IMO and the WTO rules at MEPC 64 and invited further submissions and contributions (MEPC 63/23, paragraph 5.41).

5.17 The Committee also recalled that MEPC 64 considered document MEPC 64/5/3 (India and Saudi Arabia) entitled "Possible incompatibility between WTO rules and Market-Based Measures (MBM) for international shipping", arguing that MBMs show incompatibility with the WTO rules and that the GHG-WG 3 conclusion that MBMs are, in principle, compatible with the WTO rules was premature since most of the MBM proposals are not yet elaborated enough to support that conclusion (MEPC 64/23, paragraph 5.23).

5.18 The Committee further recalled that MEPC 64 agreed that the matter could be further considered at MEPC 65, subject to the impact assessment of the proposed MBMs (MEPC 64/23, paragraph 5.24).

5.19 The Committee noted that, in this regard, the Council at its 109th session had instructed the Secretariat to seek comments from WTO on document MEPC 64/5/3 (India and Saudi Arabia), with a view to facilitating further consideration of that document at MEPC 65 (C 109/D, paragraph 6.4(v)).

5.20 The Committee noted document MEPC 65/INF.18 (Secretary-General) setting out the response by the WTO Secretariat on the matter. The delegation of India expressed the view that the WTO Secretariat was not in a position to provide the information requested and so the information in the annex to the document should not have been requested nor should it be considered further. However, the Committee noted that the request for such information had come from the Council.

UNFCCC matters

5.21 The Committee noted document MEPC 65/5 (Secretariat) on the outcome of the United Nations Climate Change Conference 2012, which was held in Doha, Qatar.

5.22 The Committee also noted that a statement by the representative of the UNFCCC Secretariat, providing a status report on the current state of negotiations in general and on bunker fuels in particular is, as requested by the UNFCCC Secretariat, set out in annex 20.

5.23 The Committee requested the Secretariat to continue its cooperation with the UNFCCC Secretariat, to attend relevant UNFCCC meetings and, when necessary, to bring the outcome of IMO's work to the attention of appropriate UNFCCC bodies and meetings.

6 CONSIDERATION AND ADOPTION OF AMENDMENTS TO MANDATORY INSTRUMENTS

General

6.1 The Committee recalled that, at MEPC 64, it had approved, with a view to adoption at this session, draft amendments to:

- .1 MARPOL Annex I (Amendments to Form A and Form B of Supplements to the IOPP Certificate) (MEPC 64/23, paragraph 7.32 and annex 13);
- .2 the Condition Assessment Scheme under MARPOL Annex I (MEPC 64/23, paragraph 11.13 and annex 16); and
- .3 the draft Code for Recognized Organizations (RO Code) and amendments to MARPOL Annexes I and II to make the RO Code mandatory (MEPC 64/23, paragraphs 11.62, 11.63 and annex 23).

6.2 The Committee noted that the texts of the above-mentioned approved draft amendments to MARPOL were circulated by the Secretary-General on 15 October 2012, under cover of Circular letter No.3315, in accordance with the provisions of article 16(2)(a) of the MARPOL Convention.

6.3 The Committee also recalled that MEPC 64 had agreed, in principle, that a drafting group would be established at this session to make any editorial changes to the draft amendments, as necessary, before adoption by the Committee.

Amendments to MARPOL Annex I (Amendments to Form A and Form B of Supplements to the IOPP Certificate)

6.4 The Committee noted that the draft amendments, as approved by MEPC 64, together with the draft MEPC resolution on their adoption, were set out in document MEPC 65/6. No comments on the draft amendments were forthcoming and it was accordingly agreed to send them for finalization directly to the Drafting Group to be established.

Amendments to the Condition Assessment Scheme under MARPOL Annex I

6.5 The Committee noted that the draft amendments as approved by MEPC 64, together with the draft MEPC resolution on their adoption, were set out in document MEPC 65/6/1. No comments on the draft amendments were forthcoming and it was therefore agreed to send them for finalization directly to the Drafting Group to be established.

Code for Recognized Organizations (RO Code) and amendments to MARPOL Annexes I and II to make the Code mandatory

6.6 The Committee recalled that MEPC 64, having considered the draft Code for Recognized Organizations (RO Code) contained in annex 6 to document FSI 20/19, and other documents commenting on it, approved the draft Code for Recognized Organizations (RO Code), as further modified, with a view to adoption at MEPC 65, subject to the concurrent decision of MSC 91.

6.7 It was noted that, having considered the outcome of MEPC 64, MSC 91 concurred with the decision of MEPC 64 but, recognizing a cross-referencing issue in the draft RO Code with resolutions A.739(18) and A.789(19) and taking account of some proposed further modifications to the draft RO Code, it agreed to additional amendments and consequently approved the draft RO Code and its associated draft MSC resolution, as set out in annex 19 to document MSC 91/22/Add.1, with a view to adoption at MSC 92. This new text was consequently that which is now referenced in annex 1 to document MEPC 65/6/2.

6.8 The Committee also recalled that MEPC 64 had considered and approved draft amendments to MARPOL Annexes I and II to make the RO Code mandatory, with a view to their adoption at MEPC 65 after the adoption of the RO Code at the same session. The text of the proposed amendments as approved by MEPC 64, together with the draft MEPC resolution on their adoption, is set out in annex 2 to document MEPC 65/6/2.

6.9 The Committee noted, however, that with reference to the draft amendments to MARPOL Annexes I and II to make the RO Code mandatory, a slightly modified version of the draft amendments, as set out in the annex to document MEPC 65/6/2/Add.1, had been prepared by the Secretariat which took account of the outcome of MSC 91 on the same point but as related to the 1988 Load Lines Protocol. As this basically harmonized the proposed amendments with the approach taken at MSC 91, it was agreed that this document together with MEPC 65/6/2 should also be sent directly to the Drafting Group for consideration.

6.10 The delegation of Spain noted that amendments to make the RO Code mandatory were only proposed for MARPOL Annexes I and II and it was questioned how the RO Code would relate to MARPOL Annex VI adopted by the Protocol of 1997.

6.11 The Committee was advised that whilst MARPOL Annex VI refers to recognized organizations as a footnote to regulation 5, the text itself, in contrast to MARPOL Annexes I and II, does not contain any specific reference to Assembly resolutions A.739(18) and A.789(19). Accordingly, only MARPOL Annexes I and II had been considered in the context of amendments to make the RO Code mandatory.

6.12 In terms of further modifications to the RO Code, the Committee noted a proposal from IACS (MEPC 65/6/3) for four amendments/clarifications to be made to the draft RO Code before adoption at this session. IACS advised that with respect to the issue relating to the register of ships, an alternative approach to that proposed in document MEPC 65/6/3 could be considered which would be to replace the term "register" by the word "list". Additionally, it was highlighted that under the point dealing with the recognition of approval of a service supplier, there was an error in document MEPC 65/6/3 as in the text proposed, it should read "by the RO" rather than "by its ROs". It was proposed by IACS that these points along with the other amendments suggested should be considered by the Drafting Group, noting that further refinement of the texts submitted may be made, if appropriate.

6.13 The amendments put forward by IACS were fully supported by a number of delegations but other delegations expressed some concerns in relation to two of the items proposed addressing the "transfer of class provisions" and the "recognition of approval of a service supplier" and did not support these changes. The Committee concluded that the IACS proposals should be sent to the drafting group for consideration and noted additionally, as highlighted by the delegation of Australia, that other paragraphs in the draft text of the RO Code, which may be affected by the proposed changes, should also be taken into account.

6.14 The delegation of Spain requested that a qualification to the proposed text dealing with "ships constructed without a known flag State" should be considered by the Drafting Group, introducing "at least" before "with all relevant international requirements ..." so as to offer additional scope for this requirement.

6.15 The Committee was additionally informed that the Democratic People's Republic of Korea had submitted a document on the draft RO Code to MSC 92 proposing three small editorial changes (MSC 92/3/12). After considering this information, and with a view to ensuring that the text of the RO Code remains identical for adoption by both MEPC 65 and MSC 92, the Committee agreed that the modifications proposed in document MSC 92/3/12 should be taken into account by the drafting group accordingly.

Establishment of the Drafting Group

6.16 The Committee established the Drafting Group on Amendments to Mandatory Instruments, under the Chairmanship of Mr. Paul Nelson (Australia), and instructed it, on the basis of the documents submitted (MEPC 65/6, MEPC 65/6/1, MEPC 65/6/2, MEPC 65/6/2/Add.1 and MEPC 65/6/3), noting also document MSC 92/3/12, and taking into account any comments, proposals and decisions made in plenary, to:

- .1 review and finalize the draft amendments to MARPOL Annex I for Form A and Form B of Supplements to the IOPP Certificate;
- .2 review and finalize the draft amendments to the Condition Assessment Scheme under MARPOL Annex I;
- .3 review and finalize the draft Code for Recognized Organizations (RO Code) and the draft amendments to MARPOL Annexes I and II to make the RO Code mandatory; and
- .4 submit a written report to the plenary on Thursday, 16 May 2013.

Outcome of the Drafting Group and action taken by the Committee

6.17 Having considered the report of the Drafting Group on Amendments to Mandatory Instruments (MEPC 65/WP.11), which met on 15 May 2013, the Committee approved the report in general and adopted:

- .1 by resolution MEPC.235(65), amendments to MARPOL Annex I relating to Form A and Form B of Supplements to the IOPP Certificate, dealing with the removal of recording incinerator capacity, as set out in annex 21;
- .2 by resolution MEPC.236(65), amendments to the Condition Assessment Scheme under MARPOL Annex I, as a consequence of the adoption of the International Code on the Enhanced Programme of Inspections during Surveys of Bulk Carriers and Oil Tankers, 2011, as set out in annex 22;
- .3 by resolution MEPC.237(65), the Code for Recognized Organizations (RO Code), as set out in annex 23; and invited MSC 92 to make sure that the text of the RO Code adopted by MEPC 65 and MSC 92 remains identical; and
- .4 by resolution MEPC.238(65), amendments to MARPOL Annexes I and II to make the RO Code mandatory, as set out in annex 24.

6.18 In relation to these resolutions, the Committee instructed the Secretariat to check the amendments carefully for any editorial omissions and, if necessary, insert these in the final text of the amendments.

6.19 With respect to the Code for Recognized Organizations and the request to consider the removal of paragraphs A2.3.11 and A2.3.12 in light of the fact that no amendments to MARPOL Annex VI in relation to the RO Code are being adopted at this time, the Committee concluded that these paragraphs should be deleted in the text of the RO Code.

6.20 Further changes to the RO Code also agreed by the Committee included a proposal from the delegation of Turkey to add at the end of paragraph 5.9.2 "or by flag State requirements" and a correction to paragraph 8.1, as advised by the Chairman of the Drafting Group, whereby in line one the reference to "regulation 4-6" of MARPOL Annex I should be replaced by "regulation 6".

6.21 It was stressed by the observer from IACS that, as noted above in paragraph 6.17.3, it was important to ensure that the final text of the RO Code as adopted by both MEPC and MSC Committees is identical.

6.22 The delegation of Ireland made a statement in relation to the adoption of the RO Code, as set out in annex 25. The delegations of Austria, Belgium, Croatia, Cyprus, Denmark, Estonia, France, Finland, Germany, Greece, Hungary, Iceland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Portugal, Spain, Sweden and the United Kingdom aligned themselves with this position and the statement provided by Ireland.

7 INTERPRETATIONS OF, AND AMENDMENTS TO, MARPOL AND RELATED INSTRUMENTS

7.1 The Committee noted that nine documents had been submitted under this agenda item and that document MEPC 65/7/4 (IACS), dealing with matters related to MARPOL Annex VI, would be considered under agenda item 4 – Air prevention and energy efficiency.

7.2 The Committee, in noting that the remaining eight documents all relate to MARPOL Annex V and the associated guidelines, agreed to also consider document MEPC 65/10 (Liberia, Marshall Islands, Panama, ICS, BIMCO and INTERCARGO) under this agenda item as it also concerns MARPOL Annex V.

Procedural concerns

7.3 The delegation of the Netherlands, supported by some delegations, expressed concern that several documents had been submitted under this agenda item without a corresponding planned output. In referring to the debate on the procedural matter at MEPC 60, in particular, with regard to the broad definition of the title of this agenda item, which leads to the submission of proposals falling into the scope of an unplanned output, the delegation of the Netherlands informed the Committee of its intention to raise the issue under agenda item 19 – Application of the Committees' Guidelines.

Revised guidance to manage spoilt cargoes

7.4 The Committee recalled that MEPC 59 had adopted the Guidance on managing spoilt cargoes (LC-LP.1/Circ.30 and MEPC.1/Circ.688) developed by the Joint LC-LP/MEPC Correspondence Group on Boundary Issues, with a view to clarifying boundary issues between the London Convention and Protocol and MARPOL Annex V.

7.5 The Committee, having considered the revised Guidance prepared by the Joint London Convention and Protocol/MEPC Correspondence Group, taking into account the entry into force of the London Protocol and the revised MARPOL Annex V, approved the draft Revised Guidance on the management of spoilt cargoes, as set out in the annex to document MEPC 65/7 (Secretariat).

7.6 The Committee instructed the Secretariat to disseminate the Revised Guidance through LC-LP.1/Circ.58/MEPC.1/Circ.809, revoking LC-LP.1/Circ. 30 and MEPC.1/Circ.688; and inform the LC/LP governing bodies accordingly.

7.7 The Committee also noted the continuing efforts by the LC/LP governing bodies to develop outreach and training materials to increase the understanding and application of the revised *Guidance on the management of spoilt cargoes*.

7.8 The delegation of the Islamic Republic of Iran, in appreciating the effort made by the Joint LC-LP/MEPC Correspondence Group for the revision of the Guidance, nevertheless, expressed its concern over the lack, in the Guidance, of detailed description of the risks posed to the crew and the marine environment from spoilt cargoes, specific guidance on prevention and minimization of the risk of cargo corruption, as well as guidance on disposal of spoiled cargos in plastic packages or coverings.

Garbage Record Book

7.9 The Committee considered document MEPC 65/7/1 (Australia and Marshall Islands), proposing the use of an electronic system to record Garbage Record Book (GRB) entries as an alternative to the current document version required under MARPOL Annex V. The co-sponsors also proposed a draft Unified Interpretation to regulation 10.3 of MARPOL Annex V, as set out in the annex to document MEPC 65/7/1, with a view to allowing for a consistent approach to the use of electronic GRBs and an acceptance of these by all Parties to the Convention.

7.10 In welcoming the proposal, the delegations who spoke all supported the need to explore the possibility to reduce the administrative burden of the crew on board flag and port Authorities and other maritime stakeholders by using electronic record keeping. However, delegations were of the view that it would be premature to approve the proposed unified interpretation to MARPOL Annex V at this stage as more work is needed. In this connection, the Committee noted, inter alia, the following comments:

- .1 that a holistic approach should be taken to look at all the record books under MARPOL;
- .2 that generic guidance on the approval of electronic record keeping should be developed;
- .3 that the ongoing work of the FAL Committee on the electronic access to certificates and documents, as well as ship/port interface should be taken into account, with a view to avoiding duplication of work; and
- .4 that for any electronic record keeping, to comply with IMO mandatory requirements on documentation, it is imperative that port States have the complete comfort that information, including the signature, is correct, certified, verifiable, and with sufficient protection from tampering, and at least meet the requirements for paper copy.

7.11 Following the discussion, the Committee agreed to establish a correspondence group on the use of electronic record books under MARPOL and consequently instructed the drafting group to prepare the terms of reference accordingly.

7.12 In this connection, the Committee invited the FAL Committee to keep it updated on its work on the electronic access to certificates and documents, as well as ship/port interface; and invited MSC 92 to note the initiative taken by the Committee.

7.13 The Committee considered document MEPC 65/7/6 (Australia, Liberia, Marshall Islands and INTERTANKO) proposing a revision to the format of the table layout for recording entries of garbage discharges in the Garbage Record Book in the appendix to the revised MARPOL Annex V. The co-sponsors pointed out that the table in the Garbage Record Book under the revised MARPOL Annex V causes confusion as the entry for "Estimated Amount Discharged/Incinerated" is a stand-alone column, which is no longer related to the location of discharge/incineration, compared with the table prior to its revision.

7.14 In the ensuing discussion, the proposal received significant support as it was regarded as a clear improvement.

7.15 The delegation of the Netherlands, in welcoming the proposal, suggested the issuance of an MEPC circular as an interim measure, instead of developing amendments to MARPOL Annex V, until the work on the evaluation of solid bulk cargo is completed, as the delegation considered that more proposals for improvement of the Garbage Record Book may be received as a consequence of experience gained following the entry into force of the revised MARPOL Annex V.

7.16 Following the discussion, the Committee agreed to instruct the drafting group to prepare draft amendments to the form of Garbage Record Book under MARPOL Annex V, using text in document MEPC 65/7/6 (Australia, Liberia, Marshall Islands and INTERTANKO) as a basis.

7.17 In this connection, the Committee also agreed to consider, with a view to adoption, the draft MEPC resolution on the early implementation of the proposed amendments to MARPOL Annex V, as set out in annex 2 to document MEPC 65/7/6, at MEPC 66, when the Committee would be expected to adopt such amendments.

Proposal for amendments to the 2012 Guidelines for the implementation of MARPOL Annex V concerning management of boiler/economizer washdown water

7.18 The Committee had for its consideration the following documents:

- .1 MEPC 65/7/2 (Antigua and Barbuda, Barbados and Republic of Korea), proposing that soot-entrained drainage generated after washing the boiler/economizer gas side, i.e. boiler/economizer washdown, should be regarded as an operational waste under MARPOL Annex V and, therefore, its discharge should be prohibited. The co-sponsors also proposed, in the annex to their submission, draft amendments to paragraph 1.7.3 of the *2012 Guidelines for the implementation of MARPOL Annex V* to clarify the issue;
- .2 MEPC 65/7/3 (Cyprus), proposing that boiler/economizer washdown should be regarded as "other similar discharges" essential to the operation of a ship rather than "operational waste", therefore, limited quantities of water containing soot could be drained and discharged overboard; and

- .3 MEPC 65/7/8 (INTERTANKO), commenting on documents MEPC 65/7/2 and MEPC 65/7/3, and providing the observer's consideration of the issue regarding the regulation and subsequent management of boiler/economizer washdown water.

7.19 In the ensuing discussion, a slight majority of the delegations, who spoke, expressed their support to the proposal contained in document MEPC 65/7/3 as the proposal was regarded as a pragmatic solution. A number of other delegations indicated their support for the proposal contained in document MEPC 65/7/2, with a view to preventing and minimizing any unacceptable risk to the marine environment. Several delegations expressed the view that careful consideration of the issue was needed before making any decision, in particular, with regard to the environmental impact assessment of the discharge of boiler/economizer washdown water and the need for any necessary amendments to MARPOL Annex I.

7.20 After extensive discussion, the Committee, in endorsing a proposal made by the delegation of the United Kingdom, instructed the drafting group to prepare draft amendments to the *2012 Guidelines for the implementation of MARPOL Annex V*, taking into account document MEPC 65/7/3 (Cyprus) and to prepare a draft MEPC circular outlining best practice for management of boiler/economizer washdown water.

7.21 In this connection, the Committee also agreed that any Member Governments wishing to pursue the matter further should submit a proposal for an unplanned output to be included in the agenda of the BLG Sub-Committee to a future session of the Committee for consideration.

Proposal for amendments to the 2012 Guidelines for the implementation of MARPOL Annex V concerning electronic wastes

7.22 The Committee had for its consideration document MEPC 65/7/7 (India), proposing draft amendments to the *2012 Guidelines for the implementation of MARPOL Annex V*, with a view to providing guidance on disposal of electronic wastes, such as electronic cards, gadgets, computers, printer cartridges, generated on board during normal operation, maintenance or upgrading of vessels.

7.23 Noting the support for the proposal, the Committee instructed the drafting group to prepare draft amendments to the *2012 Guidelines for the implementation of MARPOL Annex V* concerning electronic wastes, taking into account document MEPC 65/7/7 (India).

Proposal for a unified interpretation of MARPOL Annex V relating to the disposal of cooking oils

7.24 In introducing document MEPC 65/7/5, the delegation of the Marshall Islands sought clarification from the Committee regarding the appropriateness of disposing of cooking oil via a ship's oil residue (sludge tank) as listed in the Supplements to the IOPP Certificates, as well as the methods of recording such disposal. The delegation of the Marshall Islands also proposed the development of a unified interpretation for this issue.

7.25 In the ensuing discussion, a number of delegations supported the proposal as a pragmatic solution. Other delegations raised concerns over the blending of cooking oil with MARPOL Annex I oil waste, pointing out that cooking oil is defined as garbage under MARPOL Annex V and its discharge is prohibited under regulation 3 of MARPOL Annex V.

7.26 Noting the divergent views on the matter, the Committee agreed to refer document MEPC 65/7/5 to BLG 18 for consideration under the agenda item "Any other business", for one session and advise the Committee accordingly.

Lack of adequate port reception facilities for the implementation of the revised MARPOL Annex V

7.27 The Committee had for its consideration document MEPC 65/10 (Liberia, Marshall Islands, Panama, ICS, BIMCO and INTERCARGO), pointing out the difficulties being experienced by shipowners and operators in obtaining "harmful to the marine environment" (HME) declarations, required by the revised MARPOL Annex V, and when cargoes have been classified as HME, finding adequate reception facilities at receiving terminals. The co-sponsors proposed that in case where no adequate port reception facilities exist at the discharge port, cargo hold washing water containing remnants of such residues may be discharged at a distance not less than 12 nautical miles from shore.

7.28 In the ensuing discussion, the majority of delegations, who spoke, indicated their general support to the proposal which would allow the discharge of solid bulk cargo hold washwater under certain conditions due to the lack of adequate reception facilities.

7.29 Taking into account comments made during the discussion, the Committee agreed that:

- .1 such relaxation should not be open-ended and a two-year time limit should be set up;
- .2 the discharge should be made outside special areas; and
- .3 the discharge should be made in cases where there are no reception facilities either at the receiving terminal or at the next port of call.

7.30 Consequently, the Committee instructed the drafting group to prepare a draft MEPC circular on adequate port reception facilities for cargoes declared as harmful to the marine environment under MARPOL Annex V.

7.31 With a view to addressing the concerns expressed and the effective implementation of MARPOL Annex V, the Committee urged Parties to MARPOL Annex V to:

- .1 ensure the provision of adequate facilities at ports and terminals for the reception of solid bulk cargo residues including those contained in washwater;
- .2 ensure shippers within their jurisdiction provide complete and accurate cargo declarations in accordance with MARPOL Annex V (and circular MEPC.1/Circ.791) and section 4 of the IMSBC Code; and
- .3 notify the Organization for transmission to the Parties concerned of all cases where the facilities are alleged to be inadequate.

7.32 To solve the problem in relation to the disposal of solid bulk cargo residues and the cargo hold washwater, the Committee agreed to keep the issue under review. The Committee further invited Member Governments and international organizations to submit to a future session of the Committee their proposals and comments on the issue, including the need to develop appropriate guidance on the reduction of the solid bulk cargo residues and treatment of cargo hold washwater, taking into account relevant work being undertaken by the DSC Sub-Committee.

7.33 The delegation of Japan, in pointing out that the information on Japanese ports shown in the table of annex 1 of document MEPC 65/10, did not reflect accurate situations of port reception facilities in Japan, made a statement on the effective implementation of the revised MARPOL Annex V in the country. This statement is set out in annex 26.

Establishment of the drafting group on proposed amendments to MARPOL Annex V and associated guidelines

7.34 The Committee established the Drafting Group on Proposed amendments to MARPOL Annex V and associated guidelines under the chairmanship of Mr. Zafrul Alam (Singapore) and instructed it, taking into account any comments, proposals and decisions made in plenary, to:

- .1 prepare draft amendments to the form of Garbage Record Book under MARPOL Annex V, using text in document MEPC 65/7/6 (Australia, Liberia, Marshall Islands and INTERTANKO) as a basis;
- .2 prepare draft amendments to the *2012 Guidelines for the implementation of MARPOL Annex V* (resolution MEPC.219(63)) concerning boiler/economizer washdown water, taking into account document MEPC 65/7/3 (Cyprus);
- .3 prepare draft amendments to the *2012 Guidelines for the implementation of MARPOL Annex V* (resolution MEPC.219(63)) concerning electronic wastes, taking into account document MEPC 65/7/7 (India);
- .4 prepare a draft MEPC circular on adequate port reception facilities for cargoes declared as harmful to the marine environment under MARPOL Annex V, taking into account document MEPC 65/10 (Liberia, Marshall Islands, Panama, ICS, BIMCO and INTERCARGO);
- .5 prepare draft terms of reference for the correspondence group on the use of electronic record books under MARPOL;
- .6 prepare a draft MEPC circular outlining best practice for management of boiler/economizer washdown water; and
- .7 submit a written report for consideration by the plenary on Thursday, 16 May 2013.

Report of the drafting group

7.35 Having considered the report of the drafting group (MEPC 65/WP.12), the Committee approved it in general and took action as indicated hereunder:

Draft amendments to the form of Garbage Record Book under MARPOL Annex V

7.36 The delegation of Vanuatu, in referring to the agreement of the drafting group to replace the heading of the column "to reception facilities or other ships (m³)" with "to reception facilities (m³)" based on the understanding that any waste collecting ship (barge) is part of a reception facility, pointed out that there are many cases where waste collecting ships are not part of a reception facility, such as supporting vessels for collecting garbage from offshore facilities and mobile offshore units (MOUs). The delegation was of the view that, although the proposed change would not materially affect the heading, it would be desirable that Members Governments could have the same understanding, with a view to avoiding any different interpretations.

7.37 Following the suggestion by the delegation of the Netherlands, the Committee agreed to modify the text of garbage category C to read "Domestic waste".

7.38 Subsequently, the Committee approved the draft amendments to the form of Garbage Record Book under MARPOL Annex V, as set out in annex 27 for circulation, with a view to adoption at MEPC 66.

Amendments to the 2012 Guidelines for the implementation of MARPOL Annex V concerning electronic wastes

7.39 The Committee adopted, by resolution MEPC.239(65), *Amendments to the 2012 Guidelines for the implementation of MARPOL Annex V* (resolution MEPC.219(63)), as set out in annex 28.

MEPC circular on adequate port reception facilities for cargoes declared as harmful to the marine environment under MARPOL Annex V

7.40 The Committee approved the draft MEPC circular on adequate port reception facilities for cargoes declared as harmful to the marine environment under MARPOL Annex V and instructed the Secretariat to disseminate it as MEPC.1/Circ.810.

7.41 In this context, the Committee agreed to set the time limit for the application of the circular to 31 December 2015.

Terms of reference for the Correspondence Group on the use of electronic record books under MARPOL

7.42 The Committee noted that the drafting group had prepared the draft terms of reference for the proposed correspondence group, as set out in annex 4 of document MEPC 65/WP.12.

7.43 The delegation of Spain suggested that the correspondence group should develop some minimum conditions which electronic recording should comply with for acceptance by port State Authorities.

7.44 The delegation of China, in supporting the establishment of the correspondence group, expressed the view that the group should first consider the necessity and feasibility of using electronic recording, rather than developing relevant guidance.

7.45 Having agreed to delete the second and third points of the draft terms of reference, the Committee established the Correspondence Group on the use of electronic record books under MARPOL under the coordination of Australia¹, and instructed it, taking into account the comments and decisions made at MEPC 65, to:

- .1 prepare draft guidance for the use of electronic record books under MARPOL, taking into account document MEPC 65/7/1 and the ongoing work of the FAL Committee in this respect; and
- .2 submit a written report to MEPC 66.

7.46 With a view to facilitating future work in this respect, the Committee, in endorsing the proposal by the delegation of the Bahamas, agreed to modify 8.0.3.2 of its planned output to read "Electronic access to, or electronic versions of, certificates and documents including record books required to be carried on ships", for endorsement by C110. The Committee invited the MSC and FAL Committees to note this action.

Boiler/economizer washdown water

7.47 The Committee noted that the drafting group had prepared the draft amendments to the *2012 Guidelines for the implementation of MARPOL Annex V* to define boiler/economizer washdown as "other similar discharges" essential to the operation of a ship and a draft MEPC circular outlining best practice for management of boiler/economizer washdown water.

7.48 The observer from BIMCO, supported by the delegation of India, suggested that ships with small boiler/economizer installed may consider complying with these recommendations by removing the soot particles from bilges by mechanical means.

7.49 A number of delegations expressed their concerns on the draft MEPC circular, pointing out that the proposed best practice was impracticable and unduly prescriptive; in contradiction with the proposed amendments to the *2012 Guidelines*; and may entail retrofitting of the ships. Those delegations believed that the issue needs full consideration by a sub-committee before making any decision so as not to provide confusing guidance to the shipping industry.

7.50 Following the discussion, the Committee did not approve the draft amendments to the *2012 Guidelines for the implementation of MARPOL Annex V* to define boiler/economizer washdown as "other similar discharges" nor the draft MEPC circular outlining best practice for management of boiler/economizer washdown water.

7.51 The Committee reiterated its decision that any Member Governments wishing to pursue the matter further should submit a proposal for an unplanned output to be included in the agenda of the BLG Sub-Committee to a future session of the Committee for consideration.

¹

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8 IMPLEMENTATION OF THE OPRC CONVENTION AND THE OPRC-HNS PROTOCOL AND RELEVANT CONFERENCE RESOLUTIONS

Reports of the fifteenth meeting of the OPRC-HNS Technical Group

8.1 The Committee recalled that at MEPC 64 it had considered and approved the reports of the thirteenth and fourteenth meetings of the OPRC-HNS Technical Group, as well as approving the scheduling of the Group's fifteenth session in the week prior to MEPC 65.

8.2 The Committee noted that the fifteenth meeting of the OPRC-HNS Technical Group was held from 7 to 10 May 2013 under the chairmanship of Mr. Alexander Von Buxhoeveden (Sweden), and that the report of the meeting was issued under document MEPC 65/WP.2.

8.3 The Committee approved the report in general and, in particular:

- .1 noted the progress made on part III of the IMO Dispersant Guidelines;
- .2 concurred with the Group's proposal to refer the Guide on oil spill response in ice and snow conditions to the Arctic Council's Emergency Prevention, Preparedness and Response (EPPR) Working Group for further development;
- .3 noted the progress made in the elaboration of the Guideline on international offers of assistance in the event of a major oil pollution incident;
- .4 noted the progress made on the Guidance on the safe operation of oil pollution combating equipment;
- .5 continued to urge delegations to submit information to further expand the inventory of information resources on OPRC/HNS-related matters;
- .6 endorsed the Secretariat's ongoing support to the Triennial Oil Spill Conference Series;
- .7 noted the further assessment and development of the high priority item on elements for HNS contingency planning;
- .8 approved the revision of section II of the Manual on Oil Pollution – Contingency Planning to include new information related to contingency planning for offshore units, sea ports and oil handling facilities;
- .9 welcomed the election of Mr. Woo-Rack Suh (Republic of Korea) as Chairman and Mr Christophe Rousseau (France) as Vice-Chairman of the OPRC-HNS Technical Group for the 2014-2015 biennium;
- .10 extended the thanks and appreciation of the Committee to the outgoing Chairman Mr. Alexander von Buhoeveden (Sweden) for his leadership and support of the OPRC-HNS Technical Group throughout his tenure; and
- .11 approved the draft planned output and provisional agenda of the sixteenth meeting of the OPRC-HNS Technical Group and the scheduling of the meeting in the first half of 2014, subject to a decision being taken on the restructuring of the Sub-Committees. The final arrangement of the meeting will be circulated in due course.

Manual on Chemical Pollution to address legal and administrative aspects of HNS incidents

8.4 The Committee recalled that, at MEPC 55, it had concurred with the OPRC-HNS Technical Group's proposal for the development of guidance materials to address the legal and administrative aspects of HNS incidents and had correspondingly added this item as an unplanned output to the work of the OPRC-HNS Technical Group.

8.5 Having considered document MEPC 65/8 (Secretariat) with regard to the finalized draft text of the Manual on Chemical Pollution to address legal and administrative aspects of HNS incidents and having noted that several delegations supported the need for a more in-depth review of the document, the Committee agreed to defer a decision on matter and invited interested delegations to submit any comments on the draft manual to MEPC 66, accordingly.

Updating of the IMO Dispersant Guidelines

8.6 The Committee recalled that, at MEPC 57, it had agreed to add an unplanned output to update the IMO Dispersant Guidelines to the planned output of the OPRC-HNS Technical Group.

8.7 Having considered document MEPC 65/8/1 (Secretariat) related to the finalized draft texts of parts I and II of the updated IMO Dispersant Guidelines, as developed by the OPRC-HNS Technical Group, the Committee:

- .1 approved the finalized draft texts of parts I and II of the Guidelines, as set out in annexes 1 and 2 of document OPRC-HNS/TG 14/3/2; and
- .2 instructed the Secretariat to carry out final editing and to prepare the respective parts for publishing through the IMO Publishing Service.

IMO in situ burning guidelines

8.8 The Committee recalled that MEPC 56, having considered a proposal by the United States to develop IMO in situ burning guidelines, had referred the proposal as a priority for consideration by the OPRC-HNS Technical Group at that session and had subsequently approved the inclusion of an unplanned output to the planned outputs of the Technical Group at MEPC 58.

8.9 Having considered document MEPC 65/8/2 (Secretariat) on the finalized draft text of the IMO in situ burning guidelines, which was agreed by the OPRC-HNS Technical Group at TG 14, the Committee:

- .1 approved the finalized draft text of the IMO in situ burning guidelines, as set out in the annexes to document OPRC-HNS/TG 14/3/3, as amended, taking into account the editorial comments provided; and
- .2 instructed the Secretariat to carry out any final editing and to prepare the document for publishing through the IMO Publishing Service.

Operational guidelines on sunken and submerged oil assessment and removal techniques

8.10 The Committee recalled that, at MEPC 60, having noted the OPRC-HNS Technical Group's consideration of a proposal by the United Kingdom for the development of Operational guidelines on sunken oil assessment and removal techniques, it had agreed to add this item to the planned outputs of the group.

8.11 Having considered document MEPC 65/8/3 (Secretariat) on the finalized text of the Operational guidelines on sunken and submerged oil assessment and removal techniques, which was finalized by the OPRC-HNS Technical Group, the Committee:

- .1 approved the finalized draft guidelines, as set out in annexes 1 and 2 to document OPRC-HNS/TG 14/3/6; and
- .2 instructed the Secretariat to carry out any final editing and to prepare the document for publishing through the IMO Publishing Service.

Risk assessment within an integrated multi-model oil spill prediction service

8.12 The Committee noted the information contained in document MEPC 65/INF.24 (Cyprus), providing a brief description of the Mediterranean Decision Support System for Marine Safety (MEDESS-4MS) project and the related risk assessment model for oil spills being developed within the MEDESS-4MS to address risks posed by oil spills in the Mediterranean Sea.

Maritime Emergency Response and Salvage Co-ordination Unit in the ROPME Sea Area

8.13 The Committee recalled that, at MEPC 64, it had considered the information provided by the Regional Organization for the Protection of the Marine Environment (ROPME)/Marine Emergency Mutual Aid Centre (MEMAC) on the establishment of the Maritime Emergency Response and Salvage Co-ordination Unit (MERCU) in the ROPME Sea Area.

8.14 The Committee further recalled that it had instructed the Secretariat to prepare an MEPC circular on the matter, which was duly prepared and circulated as MEPC.1/Circ.803.

8.15 The Committee, having noted the information contained in document MEPC 65/INF.25 (ROPME/MEMAC) providing updated information on the establishment of the MERCU for the ROPME Sea Area and further to comments raised by a number of delegations, requested ROPME to provide further clarification of the proposed direct costs to shipping from the implementation of the MERCU and confirmation that such costs have been minimized to the extent possible.

9 IDENTIFICATION AND PROTECTION OF SPECIAL AREAS AND PARTICULARLY SENSITIVE SEA AREAS

The need to evaluate the effectiveness of Particularly Sensitive Sea Areas and their Associated Protective Measures

9.1 The Committee noted document MEPC 65/9 (WWF and IUCN) on the need to periodically and thoroughly evaluate the effectiveness of Particularly Sensitive Sea Areas (PSSAs) and their Associated Protective Measures (APMs) using the Great Barrier Reef

PSSA as a possible case study since this area had been subjected to expansion of existing ports and the introduction of new port terminals. The Committee also noted the suggestion that such an evaluation would help determine the effectiveness of existing measures in relation to future increases in ship traffic and potential differences in vessel types, usage patterns and associated requirements for risk abatement. The Committee further noted the suggestion on the need to consider a review of other existing PSSAs, and to establish a regular process for review of all future PSSAs.

9.2 In this regard the Committee recalled that the current *Guidelines for the Identification and Designation of PSSAs* (paragraph 8.4 of the PSSA Guidelines adopted by Assembly resolution A.982(24)) already includes a mechanism for such reviews.

9.3 Several delegations highlighted the importance of the review process outlined in paragraph 8.4 of the PSSA Guidelines and stressed that the evaluation of the effectiveness of Associated Protective Measures should be an ongoing process for countries with PSSAs.

9.4 The delegation of Australia stated that the Commonwealth Government, in conjunction with the Queensland Government and the Great Barrier Reef Marine Park Authority, is undertaking a comprehensive strategic assessment to evaluate the effectiveness of current planning and management arrangements of the Great Barrier Reef World Heritage Area (GBRWhA) and adjacent coastal zone. The Committee noted that the Queensland Government is also developing a Great Barrier Reef Ports Strategy, which articulates its vision for port development and management of impacts associated with increased shipping in the GBRWhA. The Committee further noted that a North-East Shipping Management Plan was being developed as a co-operative arrangement between Commonwealth and Queensland Governments and industry that will provide a blue print for the management of shipping activities in the Great Barrier Reef, Torres Strait and the Coral Sea aimed at ensuring safe and sustainable shipping into the future with appropriate management measures implemented to reduce the risk from international shipping activities. The Committee also noted that, as part of this plan, it will submit to MEPC 66 a proposal to extend the existing Great Barrier Reef PSSA into an area of the south-west Coral Sea that is at risk from international maritime activities.

9.5 The Committee noted the view that, if the World Heritage Site Evaluation process is used in IMO, it should be reviewed in detail, including the legal basis to enable a full consideration on the applicability of the process in the context of the IMO and the PSSA concept.

9.6 The delegation of the United States indicated that it would review the sea area around the Florida Keys and the Papahānaumokuākea Marine National Monument PSSAs and would make use of the World Heritage Site Evaluation methodology to identify its utility and benefits and would report this to the Committee in due course.

9.7 The Committee, having considered the actions requested by the co-sponsors (MEPC 65/9, paragraph 11):

- .1 agreed that, as regards the recommendation to operationalize the review process, this is already dealt with under the existing PSSA Guidelines (paragraph 8.4 of the PSSA Guidelines adopted by Assembly resolution A.982(24));

- .2 Member Governments with PSSAs are reminded that they are required, in accordance with paragraph 8.4 of the PSSA Guidelines, to bring any concerns and proposals for additional measures or modifications to any APMs or the PSSA itself to IMO, particularly if the levels of threats from shipping have changed;
- .3 Member Governments which have ships operating in the area of the designated PSSA are encouraged to bring any concerns with the APMs to IMO so that any necessary adjustments may be made; and
- .4 Member Governments are encouraged, in their review of PSSAs and APMs, to use the World Heritage Site Evaluation methodology, as appropriate.

10 INADEQUACY OF RECEPTION FACILITIES

10.1 The Committee noted that the consideration of the inadequacy of port reception facilities is a standing item on its agenda.

10.2 Two documents had been submitted for consideration by the Committee under this agenda item. Since document MEPC 65/10 regarding the lack of adequate port reception facilities for the implementation of the revised MARPOL Annex V had already been considered under agenda item 7, only the report of the regional workshop on port reception facilities submitted by Belgium (MEPC 65/INF.19) was to be noted by the Committee under agenda item 10.

10.3 As part of the Action Plan on Tackling the Inadequacy of Port Reception Facilities approved by the Committee, TC 61 agreed to include the Plan of Assistance and Training on Port Reception Facilities for Developing Countries as a priority theme for the next ITCP biennium 2012-2013. In this regard, the Committee was informed that two workshops on port reception facilities had been planned: one in Antwerp for the benefit of Mediterranean and Arab countries, which took place in November 2012, and the other one in the United States for the benefit of Caribbean countries, which is scheduled for July 2013.

10.4 Subsequently, the Committee noted the information provided by Belgium in document MEPC 65/INF.19 on the conclusions drawn during the IMO Regional Workshop on Port Reception Facilities, which was hosted by the Public Waste Agency of Flanders and the Port of Antwerp for countries bordering the Mediterranean Sea as well as Djibouti, Oman and Yemen. The workshop was held from 27 to 29 November 2012 in Antwerp, Belgium, and was attended by 35 participants. Its main aim was to raise awareness on issues related to port reception facilities, including reception and storage of ship-generated waste, downstream waste management, and the final disposal of this waste.

10.5 The Committee, in recalling that the policy of "zero tolerance of illegal discharges from ships" can only be effectively enforced when there are adequate reception facilities in ports, urged all Parties to the MARPOL Convention, in particular port States, to fulfil their treaty obligations by providing adequate reception facilities for wastes generated during the normal operation of ships.

11 REPORTS OF SUB-COMMITTEES

11.1 The Committee had for its consideration the outcome of BLG 17, FSI 21, DE 57, DSC 17, FP 56 and SLF 55, and agreed to consider document MEPC 65/12/4 on "urgent matters emanating from FAL 38" under this agenda item as it relates to the outcome of FSI 21 concerning the list of certificates and documents required to be carried on board

ships. The Committee also noted that among the nine documents submitted under this agenda item, documents MEPC 65/11/3 (United States) and MEPC 65/11/4 (China) had already been considered under agenda item 4 – Air Pollution and Energy Efficiency.

OUTCOME OF BLG 17

11.2 The Committee noted that the Sub-Committee on Bulk Liquids and Gases (BLG) had held its seventeenth session from 4 to 8 February 2013, and its report on that session had been circulated under the symbols of BLG 17/18 and BLG 17/18/Add.1. Matters of relevance to the work of the Committee were reported in document MEPC 65/11/2.

11.3 The Committee approved, in general, the report of BLG 17 (BLG 17/18 and BLG 17/18/Add.1) and took action as indicated hereunder.

Outcome of ESPH 18

11.4 The Committee endorsed the decisions taken by BLG 17 regarding the outcome of ESPH 18, subject to concurrent decision of MSC 92.

Draft amendments to the IBC Code

11.5 The Committee approved, subject to concurrent decision of MSC 92, the draft amendments to the IBC Code, as set out in annex 29, for circulation, with a view to adoption at MEPC 66.

Evaluation of new substances

11.6 The Committee endorsed BLG 17's evaluation of two new substances and their consequential inclusion in the IBC Code.

Evaluation of cargo tank cleaning additives

11.7 The Committee endorsed BLG 17's evaluation of cargo tank cleaning additives found to meet the requirements of regulation 13.5.2 of MARPOL Annex II, as set out in annex 2 to document BLG 17/18, for inclusion in the next edition of the MEPC.2/Circular.

Evaluation of trade-named mixture products

11.8 The Committee endorsed BLG 17's evaluation of three trade-named mixture products for inclusion in List 3 of the MEPC.2/Circular, with validity for all countries and no expiry date.

Amendments to the Revised Guidelines and Specifications for Oil Discharge Monitoring and Control Systems for Oil Tankers

11.9 The Committee adopted, by resolution MEPC.240(65), the *2013 Amendments to the Revised Guidelines and Specifications for Oil Discharge Monitoring and Control Systems for Oil Tankers* (resolution MEPC.108(49)), set out in annex 30 .

11.10 In this connection, the delegation of the Netherlands, in referring to paragraph 2 to the newly-adopted resolution, which recommends that the 2013 amendments should apply to oil tankers constructed on or after 1 January 2005, drew the attention of the Committee to the fact that oil tankers constructed before 1 January 2005 should apply the provisions in

paragraph 1.2.2 of the original Guidelines (adopted by resolution MEPC.108(49)). The Committee endorsed the view of the delegation of the Netherlands.

Guidance on the timing of replacement of existing certificates by revised certificates

11.11 The Committee noted that BLG 17 had prepared the draft MSC-MEPC circular on *Guidance on the timing of replacement of existing certificates by revised certificates as a consequence of the entry into force of amendments to the IBC Code*.

11.12 In considering the draft circular, the delegation of the Netherlands suggested that the draft circular should only apply when chapters 17 and 18 of the IBC Code are amended and that MSC-MEPC.5/Circ.6, *Guidance on the timing of replacement of existing certificates by the certificates issued after the entry into force of amendments to certificates in IMO instruments* should apply when other chapters of the IBC Code are amended. The delegation also suggested modifying the title of the draft circular to emphasize its application.

11.13 In endorsing the view of the delegation of the Netherlands, the Committee approved, subject to concurrent decision of MSC 92, the draft MSC-MEPC circular on *Guidance on the timing of replacement of existing certificates by revised certificates as a consequence of the entry into force of amendments to chapters 17 and 18 of the IBC Code*, as set out in annex 4 to document BLG 17/18.

Guidance for evaluating the 2011 Biofouling Guidelines

11.14 The Committee approved the draft Guidance for evaluating the 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species, as set out in annex 10 to document BLG 17/18, and instructed the Secretariat to distribute it as MEPC.1/Circ.811.

Other outcome of BLG 17

11.15 The Committee recalled that the outcome of BLG 17 concerning ballast water management and prevention of air pollution from ships had been dealt with under agenda items 2 and 4, respectively.

Pollution incidents in the English Channel

11.16 The observer from CSC, supported by the observer from WWF, in referring to the recent serious pollution incidents in the English Channel which caused the death of over 4,000 seabirds covered in the substance polyisobutylene (alternatively polyisobutene or PIB), requested an urgent review of PIB's classification status under MARPOL Annex II. The observer urged Member Governments and international organizations to submit proposals and comments for consideration by MEPC 66 and/or BLG 18 as appropriate. As requested, the statement is set out in annex 31.

11.17 The delegation of the United Kingdom informed the Committee that the above-mentioned incidents were being investigated by the Maritime and Coastguard Agency. Their statement is set out in annex 31.

11.18 In this connection, the observers from IPTA and ICS expressed the view that any regulatory measures should only be considered after the full investigation of the incidents has been completed and the results have been made available to the Organization. The statement made by the observer from IPTA is set out in annex 31.

OUTCOME OF FSI 21

11.19 The Committee noted that the Sub-Committee on Flag State Implementation (FSI) had held its twenty-first session from 4 to 8 March 2012, and its report on that session had been circulated under documents FSI 21/18 and FSI 21/18/Add.1. Matters of relevance to the work of the Committee were reported in document MEPC 65/11/7.

11.20 The Committee approved, in general, the report of FSI 21 (FSI 21/18 and FSI 21/18/Add.1) and took action as indicated hereunder.

Certificates and documents required to be carried on board ships

11.21 The Committee recalled that FAL 36, MSC 88 and MEPC 62 had approved the list of certificates and documents required to be carried on board ships (FAL.2/Circ.123 MEPC.1/Circ.769-MSC.1/Circ.1409), and that MEPC 64 and MSC 91 had concurred with the recommendation of FSI 20 for the FSI Sub-Committee to initiate revisions to the list, as may be necessary.

11.22 The Committee noted that FAL 38, in considering the revised list of certificates and documents required to be carried on board ships prepared by FSI 21, as set out in annex 1 to document FSI 21/18/Add.1, had agreed to further modify the list in order to incorporate some amendments to the information on stability and to add a reference to the Grain Loading Manual.

11.23 The Committee approved the draft revised FAL.2-MEPC.1-MSC.1 circular on list of certificates and documents required to be carried on board ships, as set out in annex 1 to document FAL 38/15, subject to concurrent decision of MSC 92.

11.24 In this connection, the Committee also endorsed, subject to concurrent decision of MSC 92, the recommendation of FSI 21 that certificates carried on board have to be valid and drawn up in the form corresponding to the model where required by the relevant international convention and that a certificate may also be considered as "original" or "authentic" while containing an "authorized" electronically applied signature or stamp.

Draft Assembly resolution on Notification and circulation through the GISIS

11.25 The Committee approved, subject to concurrent decision of MSC 92, the draft Assembly resolution on *Notification and circulation through the GISIS*, set out in annex 32, for consideration and adoption at A 28.

MEPC circulars related to port reception facilities

11.26 The Committee recalled that MEPC 63 had instructed the FSI Sub-Committee to review and update various MEPC circulars related to port reception facilities, as necessary, in light of the entry into force on 1 January 2013 of the revised MARPOL Annex V, and also with regard to the amendments to MARPOL Annexes I, II, IV, V and VI on regional arrangements for port reception facilities, which would enter into force on 1 August 2013.

11.27 The Committee, having considered the draft circulars prepared by FSI 21, approved:

- .1 MEPC/Circ.470/Rev.1 on Waste reception facility reporting requirements;
- .2 MEPC.1/Circ.469/Rev.2 on Revised consolidated format for reporting alleged inadequacies of port reception facilities;

- .3 MEPC.1/Circ.644/Rev.1 on Standard format for the advance notification form for waste delivery to port reception facilities;
- .4 MEPC.1/Circ.645/Rev.1 on Standard format for the waste delivery receipt; and
- .5 MEPC.1/Circ.671/Rev.1 on Guide to good practice for port reception facility providers and users;

and instructed the Secretariat to issue them as a matter of urgency with the exception of circular MEPC/Circ.470/Rev.1, which should only be issued after the entry into force of the amendments on regional agreements under MARPOL on 1 August 2013.

11.28 Following the proposal of the delegation of the Bahamas, the Committee instructed the Secretariat to consolidate all the five circulars related to port reception facilities into one and submit it to MEPC 66 for approval.

Guidelines to assist investigators in the implementation of the Casualty Investigation Code

11.29 The Committee approved, subject to concurrent decision of MSC 92, the draft Assembly resolution on *Guidelines to assist investigators in the implementation of the Casualty Investigation Code* (resolution MSC.255(84)), as set out in annex 33, for consideration and adoption at A 28.

Revised harmonized reporting procedures

11.30 The Committee approved, subject to concurrent decision of MSC 92, the draft MSC-MEPC.3 circular on Revised harmonized reporting procedures – Reports required under SOLAS regulations I/21 and XI-1/6, and MARPOL articles 8 and 12, as set out in annex 5 to document FSI 21/18.

Amendments to the Survey Guidelines under the Harmonized System of Survey and Certification, 2011

11.31 The Committee approved, subject to concurrent decision of MSC 92, the draft Assembly resolution on Amendments to the *Survey Guidelines* under the *Harmonized System of Survey and Certification (HSSC), 2011* (resolution A.1053(27)), as set out in annex 34, for consideration and adoption at A 28.

2013 Non-exhaustive list of obligations under instruments relevant to the IMO Instruments Implementation Code

11.32 The Committee approved, subject to concurrent decision of MSC 92, the draft Assembly resolution on the *2013 non-exhaustive list of obligations under instruments relevant to the IMO Instruments Implementation Code (III Code)*, as set out in annex 35, for consideration and adoption at A 28.

Unified interpretation of the application of regulations governed by the building contract date, the keel laying date and the delivery date

11.33 The Committee approved, subject to concurrent decision of MSC 92, the draft MSC-MEPC.5 circular on the unified interpretation of the application of regulations governed

by the building contract date, the keel laying date and the delivery date for the requirements of the SOLAS and MARPOL Conventions, as set out in annex 9 to document FSI 21/18.

11.34 In this context, the Committee agreed that the unified interpretation should be applied from the date on which MSC 92 approves the draft circular, i.e. 21 June 2013.

OUTCOME OF DE 57

11.35 The Committee noted that the Sub-Committee on Ship Design and Equipment (DE) had held its fifty-seventh session from 18 to 22 March 2013 and its report on that session had been circulated under documents DE 57/25 and DE 57/25/Add.1. Matters of relevance to the work of the Committee were reported in document MEPC 65/11/8.

Amendments to the Unified Interpretation to regulation 12.2 of MARPOL Annex I

11.36 The Committee recalled that MEPC 62, in approving the amendments to the Unified Interpretation to regulation 12.2 of MARPOL Annex I (MEPC.1/Circ.753), had endorsed the view of IACS that, while the revised Unified Interpretation could serve as interim guidance, options should be explored to formalize the interpretation, including possible amendments to regulation 12 of MARPOL Annex I.

11.37 The Committee recalled further that MEPC 63, having considered documents MEPC 63/7/9 (IACS) and MEPC 63/7/5 (Denmark, Spain and BIMCO), providing further comments and proposals to the matter, had referred both documents to DE 57 for further consideration and advice.

11.38 The Committee noted that DE 57 had agreed to consider the proposed draft amendments to regulation 12 of MARPOL Annex I at its next session, and had recommended further amendments to the Unified Interpretation to regulation 12.2 of MARPOL Annex I (MEPC.1/Circ.753).

11.39 Having considered the draft text prepared by DE 57, the Committee approved the revised Unified Interpretation to regulation 12.2 of MARPOL Annex I, as set out in annex 36, and instructed the Secretariat to distribute it through MEPC.1/Circ.753/Rev.1. In this context, the Committee instructed the Secretariat to bring the unified interpretation in line with the usual format. The Committee also instructed the DE Sub-Committee to expedite its work on the matter, with the view to its finalizing at DE 58.

Standard specification for shipboard incinerators

11.40 The Committee recalled that the outcome of DE 57 concerning standard specification for shipboard incinerators had been dealt with under agenda item 4 (see paragraph 4.54).

Draft Polar Code

11.41 The Committee recalled that MEPC 63, after considering several options, had shown a preference for the option of amending existing instruments (e.g. SOLAS, MARPOL and its annexes, the BWM and AFS Conventions) with a reference to the Code, and had proposed that the entry-into-force dates could be coordinated by adjusting the date on which the amendments were deemed to be accepted. MEPC 63 also agreed that the Code should only include new issues and additional requirements which do not appear in existing instruments.

11.42 The Committee also recalled that MSC 91, in noting the outcome of MEPC 63 on the matter, had considered document MSC 91/8/1 (Argentina) proposing to structure the Code according to general provisions, safety measures (containing mandatory and recommendatory provisions) which would be included in a new chapter of SOLAS, and pollution prevention measures, which would be included in each of the MARPOL annexes and other pollution-related instruments as applicable. MSC 91 instructed the Sub-Committee to structure the draft Polar Code along the lines proposed in document MSC 91/8/1.

11.43 The Committee noted that, taking into account the decisions of MEPC 63 and MSC 91, DE 57 had continued its work on the development of the draft Polar Code. DE 57 invited the Committee to consider the report of the Polar Code Working Group (DE 57/WP.6), and in particular draft chapter 15 of the Polar Code, reproduced in the annex to document MEPC 65/11/8, as an urgent matter, with a view to agreement in principle. DE 57 further sought advice from the Committee on a number of specific issues, i.e. discharge of grey water, banning the use of heavy fuel oil, black carbon emissions and EEDI regulations for ships with a high-independent icebreaking capability.

11.44 In this context, the Committee recalled that issues on black carbon emissions and EEDI regulations for ships with a high independent icebreaking capability have been dealt with under agenda item 4. With regard to the question raised by the observer from CSC on having a place holder for provisions to address the black carbon emission, it was agreed that while it would not be appropriate to have this at this stage, this issue would be considered further following conclusions of the work of the BLG Sub-Committee in this respect.

General comments

11.45 The delegation of Norway, supported by a number of delegations, stated that they fully supported the development of a mandatory Polar Code by the Organization and were pleased to note that best practices are being implemented by the shipping industry to minimize the risks posed to the Polar environment. The delegation urged the Organization to expedite the work in this respect, with a view to better protection of the fragile nature of the Polar environment and addressing the uncertainty regarding the impact that increased activities would have on these regions.

11.46 The observer from ICS, supported by a number of delegations, raised the concern that many proposals submitted were not accompanied by data based on evidence or justification in the form of studies addressing the actual environmental impact assessment, cost-benefit analysis or scientific justification. Particular concern was raised on proposals made that would establish Special Area measures without adequate reception facilities and without the supporting studies usually associated with proposals for Special Areas or the subsequent scrutiny of the justification by the Committee.

11.47 The Chairperson of the DE Sub-Committee, in urging the Committee to give clear instructions to the Sub-Committee by resolving the outstanding issues emanating from DE 57 so that the target completion year of 2014 could be met, informed the Committee that, taking into account the decisions of MEPC 63 and MSC 91, work was being undertaken to structure the draft Polar Code along the lines proposed in document MSC 91/8/1 (Argentina).

Additional requirements to MARPOL Annex I

11.48 The Committee noted that DE 57, having prepared two options on additional requirements to those of MARPOL Annex I, as follows:

- option 1, allowing ships operating in Arctic waters to discharge oil or oil mixtures from machinery spaces into the sea under certain conditions, bearing in mind that under regulation 15.4 of MARPOL Annex I, for Antarctic area, any discharge into the sea of oil or oily mixtures from any ships shall be prohibited; and
- option 2, prohibiting any discharge into the sea of oil or oily mixtures from any ships,

had agreed to seek advice from the Committee on those two options.

11.49 Following the discussion, the Committee agreed to option 2, prohibiting any discharge into the sea of oil or oily mixtures from any ships.

11.50 The observer from INTERTANKO, in noting the Committee's decision, proposed that mandatory requirements for reception facilities should be developed so as to ensure and facilitate the effective implementation of the proposed requirements.

11.51 Having considered the proposal, the Committee invited Member Governments and international organizations to submit their proposals and comments on the matter to DE 58 for consideration.

11.52 The Committee noted that DE 57, having considered document DE 57/11/11 (FOEI et al.), supporting the inclusion of a provision in the draft Polar Code banning the use of heavy fuel oil (HFO) on ships operating in Arctic waters, had agreed to refer the document to MEPC 65 for consideration and advice.

11.53 After some discussion, the Committee endorsed the view of the majority of delegations who spoke that it was premature to regulate the use of heavy fuel oil (HFO) on ships operating in Arctic waters and noted the view of some delegations that it might be desirable and possible to have such regulations in place in the future.

Grey water

11.54 The Committee noted that DE 57 had agreed that proposals concerning introduction of regulations on grey water discharge should first be considered by MEPC as grey water is currently not regulated under MARPOL.

11.55 In the ensuing discussion, the proposal for regulating grey water discharge did not receive support.

Additional requirements to MARPOL Annex V

11.56 The Committee noted that DE 57, having prepared two options on additional requirements to those of MARPOL Annex V, as follows:

- option 1, only allowing discharge of food waste into the sea under certain conditions; and
- option 2, prohibiting discharge of all garbage into the sea,

had agreed to seek advice from the Committee on those two options.

11.57 Following the discussion, the Committee agreed to option 1 as listed in the paragraph above.

11.58 The delegation of Canada stated that it preferred option 2, prohibiting discharge of all garbage into the sea.

Shipboard incineration

11.59 The Committee had for its consideration document MEPC 65/11/5 (FOEI, CSC, Pacific Environment and WWF), proposing to include a provision in the draft Polar Code prohibiting shipboard incineration in Polar Regions within 12 nautical miles from the nearest land, ice shelf, land-fast ice, or area of ice concentration in excess of 10 per cent ice coverage.

11.60 In the ensuing discussion, the proposal did not receive support.

11.61 The co-sponsors, in noting the Committee's decision, indicated their intention to submit further information on the matter to a future session of the Committee for consideration.

Recommendatory provisions in the draft Polar Code

11.62 The Committee noted that DE 58 would further consider the recommendatory provisions in the draft Polar Code, as prepared by the working group established at DE 57.

11.63 In this connection, the Committee instructed the DE Sub-Committee to take into account the temperature testing requirements for ballast water management systems, as contained in the revised Methodology for information gathering and conduct of work of the GESAMP-BWWG (BWM.2/Circ.13/Rev.1), when considering relevant recommendations on the ballast water management systems.

Intersessional meeting

11.64 The Committee approved, subject to concurrent decision of MSC 92, the holding of an intersessional meeting of the Polar Code Working Group in the autumn of 2013, for submission to C 110 for endorsement.

11.65 With regard to the question of how the intersessional working group coordinates the work with the correspondence group established by DE 57, the chairperson of the DE Sub-Committee responded that the two groups would work in parallel and all the work on the draft Polar Code would be consolidated at DE 58.

OUTCOME OF DSC 17

11.66 The Committee noted that the Sub-Committee on Dangerous Goods, Solid Cargoes and Containers (DSC) had held its seventeenth session from 17 to 21 September 2012 and its report on that session had been circulated under document DSC 17/17. Matters of relevance to the work of the Committee were reported in document MEPC 65/11.

A new section in the IMSBC Code relating to the revised MARPOL Annex V

11.67 The Committee noted that DSC 17 had agreed, in general, to have a new section in the IMSBC Code relating to the revised MARPOL Annex V and that the Code's next set of amendments (03-15) would enter into force on 1 January 2017. In this context, the Committee recalled that MEPC 64 had instructed the Sub-Committee to consider how the

long-term implementation of the provisions of MARPOL Annex V concerning cargo residues could be facilitated by amendments to the IMSBC Code.

11.68 Following the suggestion by the delegation of Norway, the Committee agreed to instruct the DSC Sub-Committee to compile a list of solid bulk cargoes classified as harmful to the marine environment (HME), with a view to addressing the difficulties experienced by shipowners and operators in obtaining HME declarations.

11.69 In this connection, the observer from INTERCARGO expressed concern over the compilation of such a list, pointing out that varied concentrations of mining cargoes, due to different sources of origin, may lead to different results in terms of classification of HME.

OUTCOME OF FP 56

11.70 The Committee noted that the Sub-Committee on Fire Protection (FP) had held its fifty-sixth session from 7 to 11 January 2013 and its report on that session had been circulated under document FP 56/23. Matters of relevance to the work of the Committee were reported in document MEPC 65/11/1.

Survey and certification of fire protection of incinerator spaces

11.71 The Committee endorsed the view of FP 56 that the survey and certification of fire protection of incinerator spaces and waste stowage spaces should fall under the scope of the SOLAS Convention.

OUTCOME OF SLF 55

11.72 The Committee noted that the Sub-Committee on Stability and Load Lines and on Fishing Vessels Safety (SLF) had held its fifty-fifth session from 18 to 22 February 2013, and its report on that session had been circulated under document SLF 55/17. Matters of relevance to the work of the Committee were reported in document MEPC 65/11/6.

Draft amendments to MARPOL Annex I, BCH Code and IBC Code

11.73 The Committee approved the draft amendments to MARPOL Annex I on mandatory carriage requirements for stability instruments on board tankers, as set out in annex 37, for circulation, with a view to adoption at MEPC 66.

11.74 The Committee approved, subject to concurrent decision of MSC 92, the draft amendments to the BCH Code and the IBC Code on mandatory carriage requirements for stability instruments on board tankers, as set out in annexes 38 and 39, respectively, for circulation, with a view to adoption at MEPC 66.

11.75 The Committee, in noting that SLF 55 had prepared the draft amendments to the HSSC Guidelines concerning the amendments to MARPOL Annex I, the BCH Code and the IBC Code on mandatory carriage requirements for stability instruments on board tankers, as set out in annex 9 of document SLF 55/17, agreed to refer the text to the FSI Sub-Committee for inclusion in the future revision of the HSSC Guidelines, once the associated amendments to mandatory instruments have entered into force.

Use of national tonnage in applying international conventions

11.76 The Committee approved, subject to concurrent decision of MSC 92, the draft Assembly resolution on Use of national tonnage in applying international conventions, as set out in annex 40, for consideration and adoption at A 28.

12 WORK OF OTHER BODIES

12.1 The Committee had for its consideration the outcome of C 109 and MSC 91, including the outcome relating to review and reform of the Organization, as well as the Secretary-General's proposal on the restructuring of the sub-committees, which had been prepared at the request of MSC 91. The Committee noted that among the six documents submitted under this agenda item, document MEPC 65/12/4 on urgent matters emanating from FAL 38 had been dealt with under agenda item 11.

OUTCOME OF MSC 91

12.2 The Committee noted that the ninety-first session of the Maritime Safety Committee (MSC 91) had been held from 26 to 30 November 2012, and its report on that session had been circulated under the symbols MSC 91/22 and addenda. The matters of interest to the Committee were summarized in documents MEPC 65/12/2 and MEPC 65/12/2/Add.1.

12.3 The Committee, in recalling that the outcome of MSC 91 concerning energy efficiency and the draft Code for recognized organizations had been addressed under agenda items 4 and 6 respectively, noted the following information and actions taken by MSC 91, which were of interest to it:

- .1 the concurrent approval of MSC-MEPC.2/Circ.11 on *Interim Guidelines for determining minimum propulsion power to maintain the manoeuvrability of ships in adverse conditions*;
- .2 the concurrent adoption, by resolution MSC.340(91), of the amendments to chapters 17, 18 and 19 of the IBC Code, which are identical to the amendments to the Code adopted by resolution MEPC.225(64);
- .3 the concurrent decision on how to make the Polar Code mandatory, in particular that the structure of the draft Polar Code should have a general part, a part on safety measures and a part on pollution prevention measures;
- .4 the concurrent decision to invite interested Member States to submit proposals on draft guidelines on communication of information under IMO instruments to a future session, in particular on domestic legislation, including the frequency of such reporting and the language in which information should be provided;
- .5 the concurrent decision to instruct the FSI Sub-Committee to examine the difficulties encountered by Member States in complying with the various mandatory reporting requirements, while taking into account the establishment of the Ad Hoc Steering Group for Reducing Administrative Requirements (SG RAR), with a view to avoiding any duplication of work;

- .6 the concurrent approval of the draft Assembly resolution on the *Revised Guidelines on implementation of the ISM Code by Administrations*; and
- .7 the concurrent approval of MSC-MEPC.7/Circ.8 on the *Revised Guidelines for the operational implementation of the ISM Code by Companies*.

Draft IMO Instruments Implementation Code (III Code)

12.4 The Committee noted the following actions taken by MSC 91 with regard to the draft IMO Instruments Implementation Code (III Code):

- .1 the concurrent approval of the draft Assembly resolution on Adoption of the IMO Instruments Implementation Code (III Code), for submission to the Assembly at its twenty-eighth session, for adoption;
- .2 the approval of the draft amendments to SOLAS 1974 and Load Lines Protocol of 1988 to make the III Code mandatory, for circulation in accordance with the relevant articles of the aforementioned Conventions, with a view to adoption at MSC 93; and
- .3 the adoption of the amendments to COLREG 1972, LL 1966 and TONNAGE 1969 to make the III Code mandatory, for subsequent adoption by the Assembly at its twenty-eighth session (following the procedures for adoption of amendments for the COLREG 1972, LL 1966 and TONNAGE 1969 Conventions).

12.5 The Committee also noted that, in approving and adopting the above-mentioned amendments, MSC 91 had agreed to modify the definitions of "Audit Scheme" and "Audit Standard" to read:

- .1 "Audit Scheme" means the IMO Member State Audit Scheme established by the Organization and taking into account the guidelines developed by the Organization; and
- .2 "Audit Standard" means the Code for Implementation.

12.6 The Committee, in recalling that MEPC 64 had approved the draft amendments to MARPOL Annexes I, II, III, IV, V and VI to make the III Code and auditing mandatory, concurred with the modifications to the definitions of "Audit Scheme" and "Audit Standard", as agreed by MSC 91. Consequently, the Committee instructed the Secretariat to make the necessary consequential changes when preparing the circular letter of the draft amendments to MARPOL, with a view to adoption at MEPC 66.

Formal Safety Assessment

12.7 The Committee, having considered the outcome of MSC 91 concerning Formal Safety Assessment, took the following action:

- .1 approved the draft MSC-MEPC circular on the *Revised Guidelines for Formal Safety Assessment (FSA) for use in the IMO rule-making process*, as set out in annex 34 of document MSC 91/22/Add.2, noting MSC 91's concurrent approval;

- .2 approved the draft MSC-MEPC circular on the *Guidelines for the application of Human Element Analysing Process (HEAP) to the IMO rule-making process*, as set out in annex 35 to document MSC 91/22/Add.2, noting MSC 91's concurrent approval; and
- .3 noted that the FSA study on crude oil tankers had been completed and relevant action taken by MSC 91.

OUTCOME OF C 109

12.8 The Committee noted that the 109th session of the Council (C 109) had been held from 5 to 9 November 2012 and its summary of decisions had been issued under the symbol C 109/D. The matters of interest to the Committee were summarized in document MEPC 65/12, including the Council's decision concerning the report of MEPC 64. The Committee also noted that the outcome of C 109 on matters related to the review and reform mechanism established by the Secretary-General had been reported in document MEPC 65/12/1, which would be considered together with the Secretary-General's proposal on the restructuring of the sub-committees.

12.9 The Committee noted that the Council had approved the report of the sixty-fourth session of the Marine Environment Protection Committee, as set out in document C 109/6, and had decided to transmit it, together with its comments and recommendations, to the twenty-eighth regular session of the Assembly in accordance with Article 21(b) of the IMO Convention. The Committee also noted that the Council had approved the intersessional meetings of the OPRC-HNS Technical Group and the ESPH Working Group in 2013.

12.10 The Committee noted that the Council, having considered the information provided in document C 109/5/1 on the sixth consolidated audit summary reports, had requested the Maritime Safety Committee and the Marine Environment Protection Committee to consider the reports and advise it, in due course, of the outcome of their consideration.

12.11 The Committee further noted that, with regard to the issue of confidentiality in the context of a mandatory audit scheme, the Council had decided that the release of the executive summary report and the Member State's comments on the implementation of its corrective action plan to the public or Member States would be subject to the authorization of the Member State concerned prior to the audit; and had agreed to keep this aspect of the mandatory scheme under review.

RESTRUCTURING OF THE SUB-COMMITTEES

12.12 The Committee noted that, at C 108, the Secretary-General had reported on his review and reform initiative aimed at improving IMO's delivery mechanism to handle the ever-increasing workload as the Organization seeks to address newly-emerging priorities. Comprehensive reports discussing the aforementioned initiative were contained in documents C 108/3/3 and C 109/3/1.

12.13 The Committee also noted that C 109 had considered, among other issues involving the review and reform initiative, matters related to meeting support arrangements and application of the Committees' Guidelines (C 109/D and MEPC 65/12/1).

12.14 The Committee, in particular, noted that C 109 (MEPC 65/12/1) had considered and endorsed, in principle, the restructuring of the sub-committees, which would reduce the total number of sub-committees from nine to seven with the potential saving of four meeting-weeks per biennium.

12.15 The Committee further noted that the Council had invited the MSC and MEPC to give early consideration to the implications and practicability of the relevant proposals under their purview, including appropriate new names for the sub-committees in question and to report to C 110 accordingly.

12.16 In this connection, the Committee noted that MSC 91 had preliminary discussions on matters related to the review and reform initiative and requested the Secretariat to prepare a detailed proposal containing proposed names, terms of reference, provisional agendas and biennial agendas, cost-benefit analysis and meeting dates for each body, for consideration at MEPC 65 and MSC 92. In considering the proposed changes to the working practices affecting the Committees' Guidelines and the proposed priority-setting mechanism for the Organization, MSC 91 decided to further consider those matters at MSC 92 and agreed to establish a working group in this regard, and subsequently invited Member States to submit comments and proposals to its next session.

Secretary-General's proposal

12.17 In introducing his proposal for the restructuring of the sub-committees (MEPC 65/12/3), the Secretary-General stated that, taking into account the comments expressed at MSC 91 and having consulted with the MSC and MEPC Chairmen, the Chairmen of the subsidiary bodies and specialist groups established by them, and having sought the views of the expert bodies themselves at the beginning of this year during various sub-committee meetings, he had prepared the detailed proposals for consideration, reflecting major comments already expressed at the sub-committee meetings.

12.18 The Secretary-General further advised that a synopsis of the implications and practicability of the various proposals is provided in paragraphs 5 to 17 of document MEPC 65/12/3. The proposals are, generally speaking, the amalgamation of the FP, DE and SLF Sub-Committees into two sub-committees, as set out in paragraphs 5 to 7; the amalgamation of the NAV and COMSAR Sub-Committees into one sub-committee, as set out in paragraphs 8 to 11; the slight restructuring of the BLG and DSC Sub-Committees, set out in paragraphs 12 to 15; and the renaming of the BLG, DSC, FSI and STW Sub-Committees to better reflect their current work, as set out in paragraphs 12, 13 and 16 respectively. The proposed terms of reference, provisional agenda for 2014, and arrangements for the session and the biennial agenda for 2014-2015 of the sub-committees are set out in the attached annexes.

12.19 The Secretary-General pointed out that the proposed names of the new sub-committees reflect the draft terms of reference for each body as set out in this document and, as such, they may need to be changed based on the final terms of reference and the preferences of the Committees on those issues which should be finalized, in his view, at the Assembly.

12.20 With regard to the restructuring of the BLG Sub-Committee, which is more related to the work of Committee, the Secretary-General explained that, while the original proposals put forward to the Council last year was to rename the BLG Sub-Committee as the Sub-Committee on Marine Environment, he modified this proposal taking into account the views expressed at the Council and the Maritime Safety Committee. The proposal is to rename the existing BLG Sub-Committee as the Sub-Committee on Pollution Prevention and Response (PPR) in order for it to deal with specific pollution prevention and response issues in addition to its traditional work on bulk liquid cargoes.

12.21 The Secretary-General stressed that he had maintained in his proposals a very important principle which was agreed at 2005, that each sub-committee should cover respective marine environment issues and that the Committee may give instructions to any of the sub-committees, as and when necessary. The sub-committees are equally subsidiary bodies of the MSC and the MEPC.

12.22 The Secretary-General informed the Committee that document MEPC 65/INF.16 had been prepared in response to the discussions at C 109 and MSC 91 on the anticipated cost reduction and benefits of the sub-committee restructuring with the assumption that, under the new structure, seven sub-committee meetings will be held each year. The document also covers potential opportunities for cost reduction in the Secretariat and possible other benefits contemplated as information for the Committee.

12.23 The Secretary-General also emphasized the importance of restructuring of the sub-committees with the total framework of the review and reform initiative covering:

- the long-term financial sustainability report;
- the review of work method of the Organization;
- the review of the reporting procedure, including proposal for trial for new reporting procedures to be discussed at the Council session next year;
- the review of the meeting support arrangement in the Secretariat;
- the creation of a priority setting mechanism;
- staff motivation and initiatives in the Secretariat;
- staff succession and evolution plan under consideration; and
- the continuous activities of review and reform beyond 2014.

12.24 In expressing his appreciation to Member-Governments for their understanding on the need for review and reform as reflected at the last Council session and to the Secretariat staff for support and cooperation, the Secretary-General welcomed the expert views from the Sub-Committees and the Maritime Safety Committee on the implications and practicability of the revised proposals as set out in document MEPC 65/12/3 to be reported to C 110 in July this year. In conclusion, the Secretary-General stated that a final decision should be made at the Council in July this year for the endorsement by the Assembly, at its twenty-eighth session.

General comments

12.25 In the ensuing discussion, there was wide support for the Secretary-General's proposals for restructuring of the sub-committees as part of the wider programme of review and reform of the Organization.

12.26 The delegation of China expressed the view that the restructuring of the sub-committees should not result in the increase of the number of intersessional meetings, as this would potentially impose extra burdens on those delegations which are not from native English speaking countries. The sub-committees should only deal with technical matters and any issue of policy should be retained by the Committees. The terms of reference of the sub-committees should not go beyond the requirements and provisions in

the Organization's Convention. The final decision on the restructuring of the sub-committees should be made by all Member States by consensus.

12.27 The delegation of Brazil emphasized that the Committees should function as policy-making bodies and the sub-committees as purely technical bodies, in line with the current policy of the Organization regarding the role of the Committees and sub-committees, as reflected in paragraph 3.1 of the Guidelines in MSC-MEPC.1/Circ.4/Rev.2.

12.28 The delegation of the Cook Islands, in emphasizing that the final decision on this issue should be made by all Member States at the Assembly, suggested that a joint MSC-MEPC working group be established at MSC 92 to accommodate the detailed consideration of the proposal. In referring to the recent meetings of the STW Sub-Committee and LEG and FAL Committees, the delegation expressed the view that efficiency gains should be pursued with the current structure, e.g. reducing the meeting frequency for those Committees and sub-committees with light workloads. The delegation expressed concerns over the proposed amalgamation of the FP, DE and SLF Sub-Committees into two sub-committees and the possible increase of the number of intersessional working groups.

12.29 The delegation of the United Kingdom was of the view that, in order for the Organization to progress work in a timely manner with a reduced number of meeting weeks, it is essential that the work programme is effectively managed. The addition of extra intersessional meetings and extra days of translation is acceptable on an interim basis to facilitate the completion of key outputs and smooth the transition to the new sub-committee structure. The delegation also suggested that the Organization needs, on a biennial basis, to maintain a flexible approach to the composition of its sub-committees in order to meet the constantly changing demands placed on the Organization and make-up of the High-level Action Plan.

12.30 The delegation of Vanuatu shared the concerns raised by the delegation of the Cook Islands on the merging of three sub-committees into two, and the possible increase of the intersessional working groups. The delegation suggested that more consideration should be given to the reduced frequency, as well as meeting days of the LEG and FAL Committees and the STW Sub-Committee.

12.31 The delegations of the Netherlands and Chile, in supporting the Secretary-General's proposal, indicated their intention to provide detailed comments to the working group to be established at MSC 92.

Restructuring and renaming of the BLG and DSC Sub-Committees

12.32 The delegations of Brazil and China, in supporting the restructuring and renaming of the BLG and DSC Sub-Committees, suggested:

- .1 the inclusion of the word "technical" in paragraphs 1 and 4 of terms of reference for all sub-committees. Paragraph 1 of the terms of reference would read "... the Sub-Committee will consider technical matters related to following subjects ...", and paragraph 4 of the terms of reference would read "Any other relevant technical issues referred to it by the Committees ...";
- .2 the deletion of the reference to "air pollution" in paragraph 1.1 of the terms of reference for the proposed Sub-Committee on Pollution Prevention and Response to be in line with the IMO Convention, the MARPOL Convention as well as the UNCLOS; and

- .3 further modifications to the proposed name of the Sub-Committee on Pollution Prevention and Response to read "Sub-Committee on Marine Pollution Prevention and Response".

12.33 A number of delegations supported the suggestions made by the delegations of Brazil and China.

12.34 A number of other delegations did not agree with the above proposals, pointing out that the BLG Sub-Committee had been working on matters related to prevention of air pollution from ships since 1997. Those delegations were of the view that, apart from technical matters, all the sub-committees also deal with operational matters, therefore, it would be desirable to keep the terms of reference unchanged.

12.35 Following the discussion, the Committee, in endorsing the suggestion by the Chairman, agreed:

- .1 to the inclusion of reference "technical and operational matters" in the draft terms of reference for all the sub-committees;
- .2 that the reference to "air pollution" in paragraph 1.1 of the terms of reference for the proposed Sub-Committee on Pollution Prevention and Response should be put in square brackets; and
- .3 that the new name for the BLG Sub-Committee should be decided based on its final terms of reference.

12.36 The delegation of Cyprus reserved its position on the renaming of the BLG and DSC Sub-Committees, indicating its intention to provide comments to the working group to be established at MSC 92.

12.37 The delegation of Sweden, supported by the delegation of Denmark, proposed that ESPH-related issues should be preferably dealt with by the proposed TOC Sub-Committee, so that all cargo related issues could be dealt with by one sub-committee. With regard to the possible heavy workload that the TOC Sub-Committee may have, the delegation of Sweden suggested that this could be overcome by properly adjusting resources for the sub-committees.

12.38 The delegation of Norway suggested that, taking into account the workload of the ESPH Working Group, the group should meet only intersessionally once a year or once every two years and should no longer meet during the session of the Sub-Committee, so that a place for a working group during the session of the Sub-Committee could be saved to accommodate other important subjects.

12.39 With regard to the suggestion by the delegation of Germany on the establishment a ballast water working group to further develop the guidance for ballast water sampling and analysis, the Chairman stated that the final selection of the working and drafting groups should be made at a later stage, taking into account the submissions received.

12.40 Following the discussion, the Committee agreed, in principle, to the restructuring and renaming of the BLG and DSC Sub-Committees, together with the proposed names, terms of reference, provisional agenda for 2014, working arrangements for 2014 and biennial agendas for 2014-2015, as set out in annexes 4 and 5 to document MEPC 65/12/3, subject to concurrent decision of MSC 92, noting detailed consideration would take place at that session. The Committee invited MSC 92 to take into account comments and decisions made at MEPC 65 during its deliberation, including those outstanding issues referred to in paragraph 12.35.

Renaming of the FSI Sub-Committee

12.41 The Committee agreed, in principle, to the renaming of the FSI Sub-Committee to the Sub-Committee on Implementation of IMO Instruments (III) and its terms of reference, provisional agenda for 2014, working arrangements for 2014 and biennial agenda for 2014-2015, as set out in annex 6 of document MEPC 65/12/3, subject to concurrent decision of MSC 92, noting detailed consideration would take place at that session.

12.42 With regard to the proposed working arrangements for the first session of the III Sub-Committee, the Committee confirmed that there would be no intersessional working group on Casualty Analysis and Statistics.

Restructuring of the FP, DE, SLF, NAV and COMSAR Sub-Committees and the renaming of the STW Sub-Committee

12.43 The Committee agreed, in principle, to the amalgamation of the FP, DE and SLF Sub-Committees into two sub-committees; the amalgamation of the NAV and COMSAR Sub-Committees into one sub-committee; the renaming of the STW Sub-Committee; together with the proposed names, terms of reference, provisional agenda for 2014, working arrangements for 2014 and biennial agendas for 2014-2015, as set out in annexes 1, 2, 3 and 7 of document MEPC 65/12/3, subject to concurrent decision of MSC 92, noting detailed consideration would take place at that session.

WORKING TOWARDS A SUSTAINABLE MARITIME TRANSPORTATION SYSTEM

12.44 The Committee recalled that MEPC 64 had noted the outcome of the United Nations Conference on Sustainable Development (Rio+20) as well as IMO's own contribution to the follow-up of the United Nations-led work within the context of the development of Sustainable Development Goals. In this regard, MEPC 64 noted that the Secretary-General had defined eight key elements or "pillars" on which IMO's Sustainable Development Goals for shipping and the maritime industries should focus, and had initiated an internal process to establish a vision for sustainable maritime development.

12.45 In referring to the theme of World Maritime Day 2013 "Sustainable Development: IMO's Contribution Beyond Rio+20", the Secretary-General gave the Committee a brief update on the current work in the follow-up to Rio+20.

12.46 The Secretary-General informed the Committee that, after the Rio+20 Conference last year, the matter was discussed within the United Nations system and now the intergovernmental process under the United Nations General Assembly was underway, primarily through the Open Working Group for Member States, towards the development of Sustainable Development Goals. The IMO Secretariat is involved in consultations as part of the United Nations system providing relevant information to the Open Working Group. The substantial Sustainable Development Goals were expected to begin to emerge by the end of this year.

12.47 The Secretary-General continued that, with a view to IMO contributing to the overall United Nations effort to ensure sustainable development, and to highlight the importance of maritime transportation in this context, he had, with his colleagues in the Secretariat, initiated a process of informal consultations with various stakeholders and organizations to develop a concept for sustainable maritime development, as his initiative. If successful, the consultation would result in a vision for a future sustainable maritime transportation system serving the needs of society through safer, cleaner, more efficient and reliable maritime transportation, as shipping is essential for sustainable development as well as global growth and prosperity.

12.48 The Secretary-General explained that, as a matter of fact, it was his original intention last year to involve the Committees and the Council in generating views to develop IMO's formal contribution to the inter-governmental process. However, taking into account the present status of the inter-governmental processes in the United Nations, it had not been possible to provide IMO's views on the United Nations-wide Sustainable Development Goals – as these have not yet been developed – and he therefore decided his initiative would not be a contribution to the current formal process within the United Nations, as such, but building upon the global momentum to follow up the outcome of Rio+20 and "The Future We Want" document.

12.49 The Secretary-General stated that the Organization would generate a concept of a sustainable maritime transportation system for further consideration in the context of this year's World Maritime Day theme. The progress towards the development of such a concept was being considered with shipping industry partners. It was his intention to provide the concept in connection with World Maritime Day 2013 and celebration in September as his own contribution for celebrating this year's World Maritime Day under the theme on sustainability of the maritime transportation system.

12.50 In response to the question raised by the delegation of the Cook Islands concerning the economic aspect of the maritime transportation system, the Secretary-General pointed out that "The Future We Want" document, as the outcome of Rio+20, contains three important elements: environmental, social and economic. The informal consultations with various stakeholders cover various elements forming the transportation system, not only shipping companies but also for example port management, security and shipbuilding, as well as human resources, training and education. It covers not only environment aspects but also social as well as economic aspects. The Secretary-General wished that through the wide consultations over the summer, a clear concept of sustainability of the international transportation system could form his contribution towards this year's Word Maritime Day celebration.

13 HARMFUL ANTI-FOULING SYSTEMS FOR SHIPS

13.1 The Committee noted that the International Convention on the Control of Harmful Anti-Fouling Systems on Ships had been in force since 17 September 2008 and that, to date, the Convention has 65 Parties representing 82.25 per cent of the gross tonnage of the world's merchant fleet. All those States that have not yet ratified this Convention were invited to do so at the earliest opportunity.

13.2 In considering the outcome of BLG 17 (MEPC 65/11/2), the Committee noted that under item 11, it had approved the draft MEPC circular on Guidance for evaluating the 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species.

13.3 The Committee, noting that no documents had been submitted to the current session, invited Member States and observer organizations to provide information or proposals under this item to future sessions of the Committee, recognizing its importance for the smooth and coordinated implementation of the AFS Convention.

14 PROMOTION OF IMPLEMENTATION AND ENFORCEMENT OF MARPOL AND RELATED INSTRUMENTS

14.1 The Committee noted that document MEPC 65/INF.22 (Canada) provided useful information on a new system (Eltide System) for managing wastewater from ships. The system is designed to eliminate discharges of bilge water, sewage water and grey water overboard from a ship into the sea.

15 TECHNICAL CO-OPERATION ACTIVITIES FOR THE PROTECTION OF THE MARINE ENVIRONMENT

Thematic priorities for the Integrated Technical Co-operation Programme (ITCP) for 2014-2015

15.1 The Committee recalled that TCC 61 (21 to 23 June 2011) approved the ITCP 2012-2013 biennium, which reflected the High-level Action Plan of the Organization, and its related thematic priorities.

15.2 The Committee noted that, in the context of the Secretary-General's review and reform initiatives related to technical co-operation as reflected in document C 109/3/1, a limited number of high priority technical co-operation themes have been selected to ensure a more targeted delivery to maximize the impact of the ITCP.

15.3 The Committee also noted that, while the regional needs for technical assistance have been, to a large extent, identified based on the feedback from the IMO regional coordinators and regional ITCP partners, the high-priority national needs would be identified and based on the Country Maritime Profile provided by Member States.

15.4 The Committee further noted that, to facilitate its work, the Secretariat has selected four high thematic priorities related to the protection of the marine environment for the 2014-2015 biennium covering pollution prevention, pollution response, protection of the marine biodiversity, prevention of pollution by dumping of wastes and other matters as set out in the annex to document MEPC 65/15.

15.5 The Committee, having considered the document MEPC 65/15 and the comments by the delegation of the Netherlands, noted that the new ITCP covering the 2014-2015 biennium is expected to be approved by the TCC at its sixty-third session (July 2013), and approved the thematic priorities as follows:

- .1 assisting countries in implementing the MARPOL Convention in general and more specifically in providing port reception facilities, establishing of Special Areas or PSSAs, introducing waste management and in the uniform application of the revised Annex V, and of Annex VI on energy efficiency measures for ships (EEDI, SEEMP), as well as assisting countries in the uniform implementation of the AFS Convention;
- .2 assisting countries in implementing the OPRC Convention and the OPRC-HNS Protocol and enhancing regional cooperation in marine pollution preparedness, response and cooperation as well as addressing aspects of the implementation of the relevant international regimes on liability and compensation for oil and HNS pollution damage;

- .3 strengthening national and regional capacity and fostering regional cooperation for the ratification and effective implementation of the Hong Kong Convention on ship recycling, of the BWM Convention and of the ships biofouling guidelines; and
- .4 assisting countries in ratifying and implementing the London Protocol on prevention of pollution by dumping of wastes and other matter.

Update of the activities under the ITCP and the Major Projects (2 July 2012 – 8 February 2013)

15.6 The Committee noted the information provided in document MEPC 65/15/1 on the Organization's technical co-operation activities related to the protection of the marine environment, during the period from 2 July 2012 to 8 February 2013, under the ITCP as well as under the major projects which are financed through external sources. These activities were aimed at assisting Member States in the implementation of the provisions of the relevant IMO Conventions (AFS, BWM, MARPOL, OPRC, OPRC-HNS, Ship Recycling), including the London Protocol.

15.7 The Committee further noted that, during the period under review, significant progress has been achieved through the major projects, namely the GEF-UNDP-IMO GloBallast Partnerships project and its related initiatives and the Global Industry Alliance (GIA); the GI WACAF project which aims at assisting the West, Central and Southern African region in implementing the OPRC Convention; the feasibility study on LNG-fuelled short-sea and coastal shipping in the wider Caribbean region; and the IMO-KOICA-PEMSEA project on environmental sensitivity mapping in the gulf of Thailand, including the EU-funded SAFEMED II project, implemented by the Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC) on behalf of IMO, as well as the completion of the GEF-IBRD-IMO Marine Electronic Highway (MEH) Demonstration Project on 31 December 2012, and the IMO-KOICA Project on building capacities in East Asian countries to address greenhouse gas (GHG) emissions from ships, which will be completed in May 2013.

15.8 The delegations of Chile and Nigeria highlighted the importance of IMO's ITCP activities and the key role these activities play in capacity-building for implementation of the IMO Conventions and encouraged the Secretariat to continue the capacity-building efforts. The Committee noted the information provided by Indonesia regarding the launch of the IMO-IPIECA Global Initiative programme for the East Asia region aimed at assisting the countries in the region to build capacity in oil spill preparedness and response. The Committee also noted the request by the League of Arab States to continue technical co-operation between IMO and the members of the League of Arab States to encourage ratification of IMO Conventions. The Committee further noted with appreciation the information provided by ROPME that the GEF-UNDP-IMO GloBallast Partnerships project won the 6th Marine BizTV International Maritime Award for "Best Innovative Project", held in Dubai, United Arab Emirates on 15 May 2013.

15.9 In summary, the Chairman recalled that the constituent programmes of IMO's ITCP could only be delivered if the required funding is secured from IMO's internal resources and/or external donor contributions. He expressed appreciation for all the financial and in-kind contributions to the ITCP and major projects and invited Member States and international organizations to continue and, if possible, increase their appreciable support for IMO's technical co-operation activities so that successful delivery of the programme could be achieved.

16 ROLE OF THE HUMAN ELEMENT

16.1 The Committee recalled that MSC 89 and MEPC 62 agreed to entrust a leading and coordinating role to the STW Sub-Committee to address the issue of human element.

16.2 The Committee recalled further that MEPC 63 agreed that it could refer human element issues relating to the environment directly to the Joint MSC/MEPC Working Group on the Human Element, and that the Working Group should consider the issues referred to it without further discussion in the plenary of the STW Sub-Committee.

16.3 The Committee noted that there were no documents submitted under this agenda item to this session of the Committee. However, in view that the agenda of the STW Sub-Committee contains items of relevance to the work of the Committee, the Committee agreed to keep the item in its agenda to consider any human element-related issues and the outcome of the STW Sub-Committee on the matter as appropriate.

16.4 In this connection, the delegation of the Bahamas reminded the Committee that STW 44 had proposed the deletion of three joint MEPC/MSC outputs under the joint parent bodies, MSC and MEPC, from the agenda of the next biennium.

16.5 The observer from ITF made a statement on the need for the Committee to retain a direct control of the work of the Human Element Working Group and the need to initiate the consideration of the effect on seafarers and the industry at large as a result of newly-adopted marine environment protection regulations. As requested, the statement is set out in annex 41.

17 NOISE FROM COMMERCIAL SHIPPING AND ITS ADVERSE IMPACTS ON MARINE LIFE

17.1 The Committee recalled that MEPC 62, having noted that a new output had already been planned under the biennial agenda of the DE Sub-Committee to develop technical guidelines to address the issue of noise from commercial shipping and its adverse impacts on marine life, it had instructed the DE Sub-Committee to address this issue. The Committee also decided to keep the item on its agenda, with a view to consider the outcome of the DE Sub-Committee on the matter.

Outcome of DE 57 on noise from commercial shipping and its impact on marine life

17.2 The Committee noted that DE 57 was held from 18 to 22 March 2013 and its report had been circulated under document DE 57/25. However, due to the close proximity between DE 57 and MEPC 65, the outcome of DE 57 concerning this agenda item will be reported to MEPC 66 for consideration.

18 WORK PROGRAMME OF THE COMMITTEE AND SUBSIDIARY BODIES

Items in the biennial agendas of the DE, DSC, FP, COMSAR, NAV, SLF and STW Sub-Committees relating to environmental issues

18.1 The Committee, having considered document MEPC 65/WP.4, approved the items in the biennial and post-biennial agendas of the DE, DSC, FP, COMSAR, NAV, SLF and STW Sub-Committees for 2014-2015 biennium which relates to environmental issues, as set out in annex 42, and requested the Secretariat to inform MSC accordingly; bearing in mind that these agendas may have to be adjusted in accordance with the decision of C 110 on the restructuring of sub-committees.

Biennial agendas of the BLG Sub-Committee

18.2 The Committee noted that the biennial agenda of the BLG Sub-Committee and its provisional agenda for BLG 17 were approved by MSC 91 and MEPC 63 and further noted that BLG 17 (4 to 8 February 2013) revised some of its planned outputs for the 2014-2015 biennium, including the provisional agenda for BLG 18, subject to approval by MEPC 65 and MSC 92.

18.3 The Committee, having considered annex 1 to document MEPC 65/WP.5, approved the revised biennial agenda of the BLG Sub-Committee for the biennium 2014-2015 and the provisional agenda for BLG 18, as set out in annex 43, and requested the Secretariat to inform MSC accordingly; bearing in mind that these agendas may have to be adjusted in accordance with the decision of C 110 on the restructuring of sub-committees.

Biennial agendas for the FSI Sub-Committee

18.4 The Committee noted that MSC 91 and MEPC 64 approved the biennial agenda of the FSI Sub-Committee and the provisional agenda for FSI 21 and further noted that FSI 21 (4 to 8 March 2013) revised some of the planned outputs of the FSI Sub-Committee for the 2014-2015 biennium and provisional agenda for FSI 22, subject to approval by MEPC 65 and MSC 92.

18.5 The Committee, having considered annex 2 to document MEPC 65/WP.5, approved the revised biennial agenda of the FSI Sub-Committee for the biennium 2014-2015 and the provisional agenda for FSI 22, as set out in annex 44, and requested the Secretariat to inform MSC accordingly; bearing in mind that these agendas may have to be adjusted in accordance with the decision of C 110 on the restructuring of the sub-committees.

Status of the planned outputs of for the MEPC for the 2012-2013 biennium

18.6 The Committee noted that in accordance with paragraph 9.1 of the *Guidelines on the application of the Strategic Plan and the High-level Action Plan of the Organization*, adopted by resolution A.1013(26), the reports on the status of planned outputs included in the High-level Action Plan and priorities for the 2012-2013 biennium should be prepared and annexed to the report of each session of the Sub-Committees and Committees and to the biennial report of the Council to Assembly.

18.7 The Committee further noted that, pursuant to resolution A.1038(27), the Assembly requested the MEPC to take specific action on the approved *High-level Action Plan of the Organization and priorities for the 2012-2013 biennium*, in particular table 2 on the High-level actions and related planned outputs in full observance of the Guidelines contained in resolution A.1013(26).

18.8 The Committee approved the status of planned outputs for the 2012-2013 biennium, which was prepared by the Secretariat on the basis of annex 28 of MEPC 64/23, taking into account the progress made at this session, is set out as annex 45.

Proposals for the High-level Action Plan of the Organization and priorities for the 2014-2015 biennium

18.9 The Committee noted that, in the context of resolution A.1037(27) on the *Strategic plan for the Organization (for the six-year period 2012 to 2017)* and resolution A.1038(27) on the *High-level Action Plan of the Organization and priorities for the 2012-2013 biennium*, proposals for planned outputs of the Committee need to be prepared for consideration by

MEPC 65 for inclusion in the Organization's High-level Action Plan and priorities for the 2014-2015 biennium.

18.10 The Committee also noted that the Secretariat, in consultation with the Chairman and taking into account the progress made by the Committee during the current biennium (MEPC 64/23/Add.1, annex 28 and MSC 91/22, annexes 38 and 39), has prepared the MEPC's proposals for the High-level Action Plan for the Organization and priorities for the 2014-2015 biennium in the form of modifications to those for the 2012-2013 biennium for submission to the Council at its 110th session.

18.11 The Committee noted further that, pursuant to the decision of C 109 (C 109/D, paragraph 3.2(ii)) to use the GISIS Organizational Planning Database formats, annex 1 of document MEPC 65/WP.13 showed the changes to the 2012-2013 biennial agenda, and annex 2 to document MEPC 65/WP.13 showed the accepted outputs on the post-biennial agenda to be transferred to the Committee's proposed biennial agenda for 2014-2015.

18.12 In considering annex 1 to document MEPC 65/WP.13, some delegations expressed concerns regarding the descriptions of outputs, in particular, those "continuous" outputs, which are not based on "SMART" terms as required under resolution A.1013(26). The Chairman informed that Committee that the High-level Actions would be reviewed by MSC 92 and the Council Working Group on Prioritization for approval by C 110 and suggested that interested delegations should get involved in the review process on outputs pertaining to MEPC.

18.13 The Committee, having considered document MEPC 65/WP.13, approved the proposals for the High-level Action Plan of the Organization and priorities for the 2014-2015 biennium in respect of the MEPC, as set out in annex 46. In the meantime, the Committee instructed the Secretariat to undertake a holistic review of the outputs to ensure consistency across the work of the Organization and to submit any further changes to the annexed proposals emanating from NAV 58 and DSC 18 to CWGSP 13 or C/ES.27, as appropriate.

Items to be included in the agendas of MEPC 66, MEPC 67 and MEPC 68

18.14 The Committee, having considered document MEPC 65/WP.6 and taking into account the decisions made at this session, approved the items to be included in the agendas for MEPC 66, MEPC 67 and MEPC 68 and the proposed groups, as set out in annex 47.

Dates for MEPC 66, MEPC 67 and MEPC 68

18.15 The Committee noted that MEPC 66 would be held from 31 March to 4 April 2014 and that MEPC 67 and MEPC 68 were tentatively scheduled to be held in October 2014 and May 2015, respectively.

Working/review/drafting groups at MEPC 66

18.16 The Committee agreed, in principle, to establish the following working/review/drafting groups at MEPC 66:

- .1 Ballast Water Review Group;
- .2 Working Group on Air Pollution and Energy Efficiency;

- .3 Working Group on Ship Recycling;
- .4 Working Group on further measures to enhance energy efficiency; and
- .5 Drafting Group on Amendments to Mandatory Instruments.

Correspondence groups

18.17 The Committee agreed to establish the following intersessional Correspondence Groups, which would report to MEPC 66:

- .1 Correspondence Group on Ship Recycling; and
- .2 Correspondence Group on the use of electronic record books under MARPOL.

Intersessional meetings

18.18 The Committee agreed to hold the following intersessional meetings, subject to approval by the Council:

- .1 OPRC/HNS Technical Group to be held in the week before MEPC 66 in March 2014, which should report to MEPC 66, subject to the restructuring of the sub-committees;
- .2 ESPH Working Group to be held in October 2014, subject to the concurrent decision of MSC 92; and
- .3 Polar Code Working Group to be held in the autumn of 2013, subject to concurrent decision of MSC 92.

19 APPLICATION OF THE COMMITTEES' GUIDELINES

19.1 The Committee noted that the Committees' Guidelines currently in use are contained in MSC-MEPC.1/Circ.4/Rev.2.

19.2 With regard to the proposed changes to working practices affecting the Committees' Guidelines including revision to annotated agendas and summary reports, the Committee noted that C 109 (November 2012) took some decisions (see document MEPC 65/12/1, paragraphs 5.1 to 5.7). In this regard, the Committee, noting that C 110 (July 2013) will further consider relevant issues including the conduct and evaluation of a trial for a revised reporting format and procedures to take advantage of the use of enhanced audio-equipment (see document C 110/3/1), agreed to consider these issues at its future session.

20 ELECTION OF THE CHAIRMAN AND VICE-CHAIRMAN FOR 2014

20.1 The Committee, in accordance with rule 17 of its Rules and Procedure, unanimously elected Mr. Arsenio Dominguez (Panama) as Chairman and Dr. Naomi Parker (New Zealand) as Vice-Chairman, both for 2014.

21 ANY OTHER BUSINESS

21.1 The Committee noted that no documents had been submitted under this agenda item.

21.2 The Committee noted information provided by the delegation of Brazil concerning a voluntary compliance programme by Brazilian flagged ships in view of the entry into force on 1 January 2013 of amendments to MARPOL Annex VI (addition of chapter 4 for inclusion of regulations on energy efficiency for ships), which was disseminated under the symbol of MEPC.1/Circ.807. This voluntary compliance programme would be revoked should the amendments enter into force for Brazil.

Expression of appreciation

21.3 The Committee, in expressing its deepest appreciation for the outstanding contribution made by the Chairman, Mr. A. Chrysostomou (Cyprus), to the work of the Committee during his 10-year Chairmanship from 2003 to 2013, adopted resolution MEPC.241(65) on *Appreciation of the service to the Marine Environment Protection Committee by Mr. Andreas Chrysostomou*, as set out in annex 48.

ACTION REQUESTED OF OTHER IMO BODIES

21.4 The actions requested of other IMO bodies are summarized as follows (paragraph numbers are those of the report of MEPC 65).

21.5 The Maritime Safety Committee, at its ninety-second session, is invited to:

- .1 consider a threshold value for asbestos and advice MEPC 66 accordingly (paragraph 3.14.4);
- .2 note that MEPC 65 adopted, by resolution MEPC.235(65), the *Code for Recognized Organizations (RO Code)*, and by resolution MEPC.236(65), *Amendments to MARPOL Annexes I and II to make the RO Code mandatory*; and make sure that the text of the RO Code adopted by MEPC 65 and MSC 92 remains identical (paragraphs 6.17 to 6.20 and annexes 23 and 24);
- .3 note that MEPC 65 established a correspondence group on the use of electronic record books under MARPOL and modified 8.0.3.2 of its planned output to read "Electronic access to, or electronic versions of, certificates and documents including record books required to be carried on ships", for endorsement by C 110 (paragraphs 7.11 and 7.46);
- .4 note that MEPC 65 approved, subject to concurrent decision of MSC 92, the draft amendments to the IBC Code, for circulation, with a view to adoption at MEPC 66 (paragraph 11.5 and annex 29);
- .5 note that MEPC 65 approved, subject to concurrent decision of MSC 92, the draft MSC-MEPC circular on *Guidance on the timing of replacement of existing certificates by revised certificates as a consequence of the entry into force of amendments to chapters 17 and 18 of the IBC Code* (paragraph 11.13);
- .6 note that MEPC 65 approved the draft revised FAL.2-MEPC.1-MSC.1 circular on List of certificates and documents required to be carried on board ships, subject to concurrent decision of MSC 92 (paragraph 11.23);

- .7 note that MEPC 65 endorsed, subject to concurrent decision of MSC 92, the recommendation of FSI 21 that certificates carried on board have to be valid and drawn up in the form corresponding to the model where required by the relevant international convention and that a certificate may also be considered as "original" or "authentic" while containing an "authorized" electronically applied signature or stamp (paragraph 11.24);
- .8 note that MEPC 65 approved, subject to concurrent decision of MSC 92, the draft Assembly resolution on *Notification and circulation through the GISIS*, for consideration and adoption at A 28 (paragraph 11.25 and annex 32);
- .9 note that MEPC 65 approved, subject to concurrent decision of MSC 92, the draft Assembly resolution on *Guidelines to assist investigators in the implementation of the Casualty Investigation Code* (resolution MSC.255(84)), for consideration and adoption at A 28 (paragraph 11.29 and annex 33);
- .10 note that MEPC 65 approved, subject to concurrent decision of MSC 92, the draft MSC MEPC.3 circular on Revised harmonized reporting procedures – Reports required under SOLAS regulations I/21 and XI-1/6, and MARPOL articles 8 and 12 (paragraph 11.30);
- .11 note that MEPC 65 approved, subject to concurrent decision of MSC 92, the draft Assembly resolution on *Amendments to the Survey Guidelines under the Harmonized System of Survey and Certification (HSSC), 2011* (resolution A.1053(27)), for consideration and adoption at A 28 (paragraph 11.31 and annex 34);
- .12 note that MEPC 65 approved, subject to concurrent decision of MSC 92, the draft Assembly resolution on *2013 non-exhaustive list of obligations under instruments relevant to the IMO Instruments Implementation Code (III Code)*, for consideration and adoption at A 28 (paragraph 11.32 and annex 35);
- .13 note that MEPC 65 approved, subject to concurrent decision of MSC 92, the draft MSC MEPC.5 circular on the unified interpretation of the application of regulations governed by the building contract date, the keel laying date and the delivery date for the requirements of the SOLAS and MARPOL Conventions (paragraphs 11.33 and 11.34);
- .14 note that MEPC 65 instructed the DE Sub-Committee to finalize the work on the development of environmental provisions in the draft Polar Code at its next session, taking into decisions made and instructions given by MEPC 65 (paragraphs 11.41 to 11.64);
- .15 note that MEPC 65 approved, subject to concurrent decision of MSC 92, the holding of an intersessional meeting of the Polar Code Working Group in the autumn of 2013, for submission to C 110 for endorsement (paragraph 11.64);

- .16 note that MEPC 65 approved, subject to concurrent decision of MSC 92, the draft amendments to the BCH Code and the IBC Code on mandatory carriage requirements for stability instruments on board tankers, for circulation, with a view to adoption at MEPC 66 (paragraph 11.74 and annexes 38 and 39);
 - .17 note that MEPC 65 approved, subject to concurrent decision of MSC 92, the draft Assembly resolution on Use of national tonnage in applying international conventions, for consideration and adoption at A 28 (paragraph 11.76 and annex 40);
 - .18 note the concurrent approval of MSC-MEPC.2/12 on the *Revised Guidelines for Formal Safety Assessment (FSA) for use in the IMO rule-making process* (paragraph 12.7.1);
 - .19 note the concurrent approval of MSC-MEPC.2/13 on the *Guidelines for the application of Human Element Analysing Process (HEAP) to the IMO rule-making process* (paragraph 12.7.2);
 - .20 note that MEPC 65 approved, in principle, the Secretary-General's proposal for restructuring of the sub-committees, subject to concurrent decision of MSC 92, noting that detailed consideration will take place at that session (paragraphs 12.12 to 12.43);
 - .21 note that MEPC 65 approved, subject to concurrent decision of MSC 92, the items in the biennial and post-biennial agendas of the DE, DSC, FP, COMSAR, NAV, SLF and STW Sub-Committees for 2014-2015 biennium which relates to environmental issues, bearing in mind that these agendas may have to be adjusted in accordance with the decision of C 110 on the restructuring of sub-committees (paragraph 18.1 and annex 42);
 - .22 note that MEPC 65 approved, subject to concurrent decision of MSC 92, the revised biennial agenda of the BLG Sub-Committee for the biennium 2014-2015 and the provisional agenda for BLG 18, bearing in mind that these agendas may have to be adjusted in accordance with the decision of C 110 on the restructuring of sub-committees (paragraph 18.3 and annex 43);
 - .23 note that MEPC 65 approved, subject to concurrent decision of MSC 92, the revised biennial agenda of the FSI Sub-Committee for the biennium 2014-2015 and the provisional agenda for FSI 22, bearing in mind that these agendas may have to be adjusted in accordance with the decision of C 110 on the restructuring of the sub-committees (paragraph 18.5 and annex 44); and
 - .24 note that MEPC 65 approved, subject to concurrent decision of MSC 92, the holding of an intersessional meeting of the ESPH Working Group in 2014, for submission to C 110 for endorsement (paragraph 18.18.2).
- 21.6 The Facilitation Committee (FAL), at its thirty-ninth session, is invited to:
- .1 note that MEPC 65 established a correspondence group on the use of electronic record books under MARPOL and modified 8.0.3.2 of its planned output to read "Electronic access to, or electronic versions of,

certificates and documents including record books required to be carried on ships", for endorsement by C110 (paragraphs 7.11 and 7.46);

- .2 keep the MEPC updated on its work on the electronic access to certificates and documents, as well as ship/port interface (paragraph 7.12); and
- .3 note that MEPC 65 endorsed, subject to concurrent decision of MSC 92, the recommendation of FSI 21 that certificates carried on board have to be valid and drawn up in the form corresponding to the model where required by the relevant international convention and that a certificate may also be considered as "original" or "authentic" while containing an "authorized" electronically applied signature or stamp (paragraph 11.24).

21.7 The Sub-Committee on Bulk Liquids and Gases (BLG), at its eighteenth session, is instructed to:

- .1 note that MEPC 65 invited Member States, international or regional organizations, and industry programmes to promote and provide, directly or through IMO, support and technical assistance to secure the necessary funding for the development of the manual "Ballast Water Management – How to do it"; and invited the Technical Co-operation Committee to include in the Organization's Integrated Technical Co-operation Programme the provisions to contribute and support the production of such a manual (paragraph 2.40);
- .2 note that MEPC 65 approved BWM.2/Circ.42 on *Guidance on ballast water sampling and analysis for trial use in accordance with the BWM Convention and Guidelines (G2)* (paragraph 2.43.1);
- .3 note that MEPC 65 agreed in principle with the recommendations related to the trial period for reviewing, improving and standardizing the BWM Circular on *Guidance on ballast water sampling and analysis for trial use in accordance with the BWM Convention and Guidelines (G2)* (paragraph 2.43.2);
- .4 note that MEPC 65 adopted, by resolution MEPC.228(65), *Information reporting on type approved ballast water management systems* (paragraph 2.43.3 and annex 1);
- .5 note that MEPC 65 approved BWM.2/Circ.43 on amendments to the *Guidance for Administrations on the type approval process for ballast water management systems in accordance with Guidelines (G8)* (BWM.2/Circ.28) (paragraph 2.43.4);
- .6 note that MEPC 65 approved BWM.2/Circ.44 on options for ballast water management for Offshore Support Vessels in accordance with the BWM Convention (paragraph 2.43.5);
- .7 take into account document MEPC 65/2/17 (WWF) when developing future revisions of the BWM Circular on *Guidance on ballast water sampling and analysis for trial use in accordance with the BWM Convention and Guidelines (G2)* (paragraph 2.45);

- .8 consider the issue of using drinking water as ballast water, noting that MEPC 65 invited Member Government to submit their proposals and comments, together with relevant information to the Sub-Committee in accordance with the action planned agreed (paragraph 2.57.5);
- .9 consider document MEPC 65/4/22 (Norway) under agenda item "Consideration of the impact on the Arctic of emissions of black carbon from international shipping" (paragraph 4.23);
- .10 note that MEPC 65 agreed to retain the title for the work plan on consideration of the impact on the Arctic of emissions of black carbon from international shipping (paragraph 4.25);
- .11 note that MEPC 65 agreed that sulphur emission-averaging schemes should not be accepted under regulation 4 of MARPOL Annex VI (paragraph 4.37);
- .12 note that MEPC 65 approved the draft amendments to NO_x Technical Code 2008 on certifying dual-fuel engines, with a view to adoption at MEPC 66 (paragraph 4.40 and annex 7);
- .13 note that MEPC 65 adopted, by resolution MEPC.230(65), the *2013 Guidelines as required by regulation 13.2.2 of MARPOL Annex VI in respect of non-identical replacement engines not required to meet the Tier III limit* (paragraph 4.43 and annex 8);
- .14 note that MEPC 65 approved MEPC.1/Circ.812 on unified interpretation relating to "time of the replacement or addition" of an engine for the applicable NO_x Tier standard for the Supplement to the IAPP Certificate, as referred to in regulation 13.2.2 of MARPOL Annex VI (paragraph 4.46);
- .15 note that MEPC 65 approved MEPC.1/Circ.813 on unified interpretation on "identical" replacement engines under regulation 13 of MARPOL Annex VI (paragraph 4.50);
- .16 consider document MEPC 65/7/5 (Marshall Islands) relating to the disposal of cooking oils under the agenda item "Any other business", for one session and advise MEPC 66 accordingly (paragraph 7.26);
- .17 note that MEPC 65 endorsed the decisions taken by BLG 17 regarding the outcome of ESPH 18, subject to concurrent decision of MSC 92 (paragraph 11.4);
- .18 note that MEPC 65 approved, subject to concurrent decision of MSC 92, the draft amendments to the IBC Code, for circulation, with a view to adoption at MEPC 66 (paragraph 11.5 and annex 29);
- .19 note that MEPC 65 endorsed BLG 17's evaluation of two new substances and their consequential inclusion in the IBC Code (paragraph 11.6);
- .20 note that MEPC 65 endorsed BLG 17's evaluation of cargo tank cleaning additives found to meet the requirements of regulation 13.5.2 of MARPOL Annex II, for inclusion in the next edition of the MEPC.2/Circular (paragraph 11.7);

- .21 note that MEPC 65 endorsed BLG 17's evaluation of three trade-named mixture products for inclusion in List 3 of the MEPC.2/Circular, with validity for all countries and no expiry date (paragraph 11.8);
- .22 note that MEPC 65 approved, subject to concurrent decision of MSC 92, the draft MSC-MEPC circular on *Guidance on the timing of replacement of existing certificates by revised certificates as a consequence of the entry into force of amendments to chapters 17 and 18 of the IBC Code* (paragraph 11.13);
- .23 note that MEPC 65 approved MEPC.1/Circ.811 on *Guidance for evaluating the 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species* (paragraph 11.14);
- .24 note that MEPC 65 approved, subject to concurrent decision of MSC 92, the revised biennial agenda of the BLG Sub-Committee for the biennium 2014-2015 and the provisional agenda for BLG 18, bearing in mind that these agendas may have to be adjusted in accordance with the decision of C 110 on the restructuring of sub-committees (paragraph 18.3 and annex 43); and
- .25 note that MEPC 65 agreed to hold the intersessional meeting of the ESPH Working Group in October 2014, subject to approval by the Council (paragraph 18.17).

21.8 The Sub-Committee on Flag State Implementation (FSI), at its twenty-second session, is instructed to:

- .1 take into account MEPC 65/2/17 (WWF) in the development of the *Guidelines for port State control under the BWM Convention* (paragraph 2.45);
- .2 note that MEPC 65 approved the amended terms of reference for the correspondence group established at FSI 21 to develop the *Guidelines for port State control under the BWM Convention* (paragraph 2.57.6);
- .3 note that MEPC 65 adopted, by resolution MEPC.235(65), the *Code for Recognized Organizations (RO Code)*, and by resolution MEPC.236(65), *Amendments to MARPOL Annexes I and II to make the RO Code mandatory* (paragraph 6.17 to 6.20 and annexes 23 and 24);
- .4 note that MEPC 65 approved the draft revised FAL.2-MEPC.1-MS.C.1 circular on List of certificates and documents required to be carried on board ships, subject to concurrent decision of MSC 92 (paragraph 11.23);
- .5 note that MEPC 65 endorsed, subject to concurrent decision of MSC 92, the recommendation of FSI 21 that certificates carried on board have to be valid and drawn up in the form corresponding to the model where required by the relevant international convention and that a certificate may also be considered as "original" or "authentic" while containing an "authorized" electronically applied signature or stamp (paragraph 11.24);
- .6 note that MEPC 65 approved, subject to concurrent decision of MSC 92, the draft Assembly resolution on *Notification and circulation through the GISIS*, for consideration and adoption at A 28 (paragraph 11.25 and annex 32);

- .7 note that MEPC 65 approved MEPC/Circ.470/Rev.1 on Waste reception facility reporting requirements; MEPC.1/Circ.469/Rev.2 on Revised consolidated format for reporting alleged inadequacies of port reception facilities; MEPC.1/Circ.644/Rev.1 on Standard format for the advance notification form for waste delivery to port reception facilities; MEPC.1/Circ.645/Rev.1 on Standard format for the waste delivery receipt; and MEPC.1/Circ.671/Rev.1 on Guide to good practice for port reception facility providers and users (paragraph 11.27);
- .8 note that MEPC 65 approved, subject to concurrent decision of MSC 92, the draft Assembly resolution on *Guidelines to assist investigators in the implementation of the Casualty Investigation Code* (resolution MSC.255(84)), for consideration and adoption at A 28 (paragraph 11.29 and annex 33);
- .9 note that MEPC 65 approved, subject to concurrent decision of MSC 92, the draft MSC/MEPC.3 circular on Revised harmonized reporting procedures – Reports required under SOLAS regulations I/21 and XI-1/6, and MARPOL articles 8 and 12 (paragraph 11.30);
- .10 note that MEPC 65 approved, subject to concurrent decision of MSC 92, the draft Assembly resolution on *Amendments to the Survey Guidelines under the Harmonized System of Survey and Certification (HSSC)*, 2011 (resolution A.1053(27)), for consideration and adoption at A 28 (paragraph 11.31 and annex 34);
- .11 note that MEPC 65 approved, subject to concurrent decision of MSC 92, the draft Assembly resolution on *2013 non-exhaustive list of obligations under instruments relevant to the IMO Instruments Implementation Code (III Code)*, for consideration and adoption at A 28 (paragraph 11.32 and annex 35);
- .12 note that MEPC 65 approved, subject to concurrent decision of MSC 92, the draft MSC MEPC.5 circular on the unified interpretation of the application of regulations governed by the building contract date, the keel laying date and the delivery date for the requirements of the SOLAS and MARPOL Conventions (paragraphs 11.33 and 11.34);
- .13 consider the inclusion in the future revision of the HSSC Guidelines guidance on mandatory carriage requirements for stability instruments on board tankers, once the associated amendments to MARPOL Annex I, the BCH Code and the IBC Code have entered into force (paragraph 11.74); and
- .14 note that MEPC 65 approved, subject to concurrent decision of MSC 92, the revised biennial agenda of the FSI Sub-Committee for the biennium 2014-2015 and the provisional agenda for FSI 22, bearing in mind that these agendas may have to be adjusted in accordance with the decision of C 110 on the restructuring of the sub-committees (paragraph 18.5 and annex 44).

21.9 The Sub-Committee on Ship Design and Equipment (DE), at its fifty-eighth session, is instructed to:

- .1 in developing the draft Polar Code, await the outcome of the BLG Sub-Committee's work on the impact on the Arctic of emissions of Black Carbon from international shipping (paragraph 4.28);
- .2 note that MEPC 65 agreed to exempt cargo ships having ice-breaking capability from the EEDI requirements and approved a draft amendment to MARPOL Annex VI with a view to adoption at MEPC 66 (paragraph 4.81);
- .3 note that MEPC 65 adopted, by resolution MEPC.239(65), the *2013 Amendments to the Revised Guidelines and Specifications for Oil Discharge Monitoring and Control Systems for Oil Tankers* (resolution MEPC.108(49)) (paragraph 11.9 and annex 28);
- .4 finalize the work on draft amendments to regulation 12 of MARPOL Annex I, noting that MEPC 65 approved MEPC.1/Circ.753/Rev.1 on revised Unified Interpretation to regulation 12.2 of MARPOL Annex I (paragraphs 11.38 and 11.39);
- .5 finalize the work on the development of environmental provisions in the draft Polar Code, in accordance with the decisions made and instructions given by MEPC 65 (paragraphs 11.41 to 11.64);
- .6 note that MEPC 65 approved, subject to concurrent decision of MSC 92, the holding of an intersessional meeting of the Polar Code Working Group in the autumn of 2013, for submission to C 110 for endorsement (paragraph 11.64); and
- .7 note that MEPC 65 approved, subject to concurrent decision of MSC 92, the items in the biennial and post-biennial agendas of the DE, DSC, FP, COMSAR, NAV, SLF and STW Sub-Committees for 2014-2015 biennium which relates to environmental issues, bearing in mind that these agendas may have to be adjusted in accordance with the decision of C 110 on the restructuring of sub-committees (paragraph 18.1 and annex 42).

21.10 The Sub-Committee on Stability and Load Lines and on Fishing Vessel Safety (SLF), at its fifty-sixth session, is instructed to:

- .1 note that MEPC 65 approved the draft amendments to MARPOL Annex I on mandatory carriage requirements for stability instruments on board tankers, for circulation, with a view to adoption at MEPC 66 (paragraph 11.73 and annex 37);
- .2 note that MEPC 65 approved, subject to concurrent decision of MSC 92, the draft amendments to the BCH Code and the IBC Code on mandatory carriage requirements for stability instruments on board tankers, for circulation, with a view to adoption at MEPC 66 (paragraph 11.74 and annex 38);
- .3 note that MEPC 65 instruct the FSI Sub-Committee to consider the inclusion in the future revision of the HSSC Guidelines guidance on mandatory carriage requirements for stability instruments on board tankers,

once the associated amendments to MARPOL Annex I, the BCH Code and the IBC Code have entered into force (paragraph 11.75); and

- .4 note that MEPC 65 approved, subject to concurrent decision of MSC 92, the draft Assembly resolution on *Use of national tonnage in applying international conventions*, for consideration and adoption at A 28 (paragraph 11.76 and annex 40).

21.11 The Sub-Committee on Dangerous Goods, Solid Cargoes and Containers (DSC), at its eighteenth session, is instructed to:

- .1 compile a list of solid bulk cargoes classified as harmful to the marine environment (HME), with a view to addressing the difficulties experienced by shipowners and operators in obtaining HME declarations (paragraph 11.68).

21.12 The Sub-Committee on Fire Protection (FP), at its fifty-seventh session, is instructed to:

- .1 note that MEPC 65 endorsed the view of FP 56 that the survey and certification of fire protection of incinerator spaces and waste stowage spaces should fall under the scope of the SOLAS Convention (paragraph 11.71).

ANNEX 1

RESOLUTION MEPC.228(65)

Adopted on 17 May 2013

**INFORMATION REPORTING ON
TYPE APPROVED BALLAST WATER MANAGEMENT SYSTEMS**

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee conferred upon it by the international conventions for the prevention and control of marine pollution,

RECALLING ALSO that the International Conference on Ballast Water Management for Ships held in February 2004 adopted the International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004 (the Ballast Water Management Convention) together with four Conference resolutions,

RECALLING FURTHER that, on entry into force, the Ballast Water Management Convention will require ships to install ballast water management systems, which meet the D-2 standard stipulated therein,

RECOGNIZING that the collection and dissemination of accurate information on type-approved ballast water management systems (BWMS) will be beneficial for all interested stakeholders,

NOTING resolution MEPC.175(58) by which the Committee adopted the Information reporting on type-approved ballast water management systems,

HAVING CONSIDERED the recommendation made by the Sub-Committee on Bulk Liquids and Gases at its seventeenth session, on the need to revise resolution MEPC.175(58),

1. INVITES Member States, when approving a ballast water management system in accordance with the Guidelines for approval of ballast water management systems (G8), to report the following information to the Organization:

- .1 approval date;
- .2 name of the Administration;
- .3 name of the BWMS;
- .4 a copy of the Type Approval Certificate and any appendices which includes details on all imposed limiting conditions on the operation of the BWMS in accordance with paragraph 6.1 of the Guidelines for approval of ballast water management systems (G8) (resolution MEPC.174(58)) as follows: Such limiting conditions to include any applicable environmental conditions (e.g. salinity, UV transmittance, temperature, etc.) and/or system operational parameters (e.g. min/max pressure, pressure differentials, min/max Total Residual Oxidants (TRO), etc.);

- .5 an annex to the Type Approval Certificate which contains the test results of each land-based and shipboard test run. Such test results shall include at least the numerical salinity, temperature, flow rates, and where appropriate UV transmittance. In addition, these test results shall include all other relevant variables;
 - .6 the protocol according to which testing was undertaken, including details on:
 - .1 whether ambient, cultured or a mixture of test organisms have been used (including a species-level identification for cultured organisms, and an identification to the lowest possible taxonomic level for ambient organisms);
 - .2 the shipboard test protocol including the operating parameters of the system during successful treatment operations, for example dosage rates, UV intensity and electrical current applied;
 - .3 energy consumption of the BWMS under normal or tested Treatment Rated Capacity (TRC), if available;
 - .4 the full test report of the land-based test including all unsuccessful, failed and invalid tests;
 - .5 the full test report of the shipboard test including all unsuccessful, failed and invalid tests, and detailed information of the test set up and actual flow rate at each test cycle;
 - .6 QA/QC documentation of the testing facility or body; and
 - .7 national accreditation of the test facility, if appropriate;
 - .7 a description of the Active Substance(s), if employed; and
 - .8 identification of the specific MEPC report and paragraph number granting Final Approval in accordance with the Procedure for approval of ballast water management systems that make use of Active Substances (G9), adopted by resolution MEPC.169(57);
2. INSTRUCTS the Secretariat to make such information available by an appropriate means;
3. REVOKES resolution MEPC.175(58).

ANNEX 2

STATEMENTS BY THE DELEGATIONS OF CANADA, DENMARK AND GERMANY AND THE OBSERVER FROM CESA ON THE DRAFT ASSEMBLY RESOLUTION ON APPLICATION OF THE INTERNATIONAL CONVENTION FOR THE CONTROL AND MANAGEMENT OF SHIPS' BALLAST WATER AND SEDIMENTS, 2004

Statement by the delegation of Canada

In considering the concerns noted in action point 36.2 of the MEPC 65/WP.7, I hope delegations will take note of Canada's compromise proposal in document J/9.

As was indicated by the delegation of France on Monday, this is a challenging matter, and there is no solution that will please everyone. The challenge before us is to find a compromise that will allow us to move forward together. A consensus of Contracting States is needed at the assembly in order to enable the adoption of this resolution.

The Review Group has built on the work of the Correspondence Group to draft a resolution. It does not amend the convention, but rather recommends an agreement amongst parties to the convention for an enforcement schedule for Regulation B-3. Such an agreement would effectively determine dates of compliance with the ballast water performance standard in regulation D-2.

Having drafted a resolution, it was noted in the Review Group that, as the new enforcement schedule refers to a renewal survey that is not harmonized with other statutory instruments, the demand for ballast water management systems could suddenly peak five years after entry into force of the Convention. This is counter to the objective of the assembly resolution.

Mr. Chairman, the Review Group considered this matter, but did not have the terms of reference to propose a solution. Additional discussion was necessary between delegations, and Canada had the honour to convene a well-attended meeting for friends of the assembly resolution immediately following the conclusion of the ballast water review group. At this meeting Canada proposed a solution in the spirit of compromise to enable the resolution to be adopted. I am pleased to report that no objection to the proposal was voiced at this meeting; in fact, a number of delegations expressed their support for it.

The Canadian proposal is outlined in paper J/9. Under this approach, the date for enforcing the ballast water performance standard in Regulation D-2, would be based on the renewal survey associated with the International Oil Pollution Prevention Certificate under MARPOL Annex I.

Because the dates for renewal of this certificate are already distributed in time, referring to it in a ballast water enforcement schedule would effectively distribute the dates of compliance with regulation D-2 more evenly over the period called for in the draft resolution as it stands.

I want to emphasize that the proposal is not to formally link the ballast water and MARPOL Convention. Rather, the International Oil Pollution Prevention Certificate is suggested as a clear and practical basis to establish a date for enforcement of the convention.

This particular certificate is linked to an environmental instrument of IMO, and is a good basis for enforcement, as 99.2% of states are Parties to MARPOL Annex I, including all Contracting States to the BWM Convention.

Mr. Chairman, Council, at its 109th session, called for pragmatic solutions to impediments to the early entry into force and implementation of the BWM Convention. On Monday, the Secretary General strongly suggested that "now is the time to move towards implementation" and urged this Committee to approve a draft resolution at this session for adoption by the Assembly in November. And Mr. Chairman, I am very hopeful that we will have the opportunity to make you happy for a second time today.

Mr. Chairman, the world is watching us and hanging on our decision on this matter. Canada believes a compromise is needed now, today, to provide a basis for consensus at the Assembly. This is a critical moment in the evolution of the ballast water management convention, and a unique opportunity for this committee to express its intention to expedite its entry into force in coming years.

Therefore, Mr. Chairman, it is in a spirit of compromise that Canada invites the Committee to consider the proposal in our J paper, with the hope that it will receive the necessary consensus to allow the assembly resolution to move forward.

Thank you Mr. Chairman.

Statement by the delegation of Denmark

Denmark recognizes the need to reconsider the application schedule of regulation B-3 of the BWM Convention since the application dates have passed.

Denmark acknowledges that the majority of States supported this decision, and that the conclusion was to draft, an Assembly resolution based on option B in conjunction with A-1 (in accordance with MEPC 65/2/11).

Denmark will not object to the majority decision, but stress that we have serious concerns regarding the consequences of this decision.

Firstly, the introduction of invasive species through ballast water is a major problem for the marine environment. The draft Assembly resolution will postpone the application of the BWM Convention and thereby delay the solving of this serious problem.

Secondly, the draft Assembly resolution will put those ships that have already installed treatment systems or are preparing to in an unfair position compared to those who have not yet done so.

Thirdly, the postponement will increase the insecurity in the market for BWM systems.

Fourthly, the change of the time schedule could have negative effect for those States that already have or are in the process of acceding to the Convention, since they might have to review the legal implications of the Assembly Resolution and possibly make changes to their national legislation or accession instruments.

Fifthly, the postponement of application for all ships constructed before the entry into force of the Convention will still be likely to create a peak demand for retro-fitting.

Lastly, this extensive draft Assembly resolution may not eliminate the obstacles that has so far kept States from ratifying the Convention and may not give the clarity needed for States to ratify.

Statement by the delegation of Germany

Germany wishes to thank the Review Group for its hard work and in particular the Chairman for his untiring dedication.

Germany is pleased to be able to inform the Committee that it intends to deposit its instrument of accession to the Ballast Water Management Convention on June 20th this year.

Unfortunately, the Draft Assembly Resolution as agreed by the Review Group represents a significant shift in one of the key elements of the Convention: the timetable of its application.

This necessitates a thorough review of the legal implications of the Draft Assembly resolution on the impending German accession. Germany intends to complete this review by the time of the Assembly meeting.

To be clear: Germany has no objections against this Draft resolution being forwarded to the Assembly at this point. It merely wishes to note that it has not finalized its position on the document but intends do so by the meeting of the Assembly later this year.

Statement by the observer from CESA

CESA expresses concern on effects of the proposed amendment which instead of easing the entry into force of the convention with a smooth phase-in will end-up in creating an unmanageable peak in retro-fitting of BW systems obtaining the opposite result and both penalizing those who have invested in the expectation that the convention would be effective, as well as creating obstacles for the Flag States who has still have to ratify the convention.

ANNEX 3

DRAFT ASSEMBLY RESOLUTION

APPLICATION OF THE INTERNATIONAL CONVENTION FOR THE CONTROL AND MANAGEMENT OF SHIPS' BALLAST WATER AND SEDIMENTS, 2004

THE ASSEMBLY,

RECALLING Article 15(j) of the Convention of the International Maritime Organization concerning the functions of the Assembly in relation to regulations and guidelines concerning maritime safety and the prevention and control of marine pollution from ships,

RECALLING ALSO the adoption by the International Conference on Ballast Water Management for Ships, held at the Organization's Headquarters in 2004, of the *International Convention for the Control and Management of Ships' Ballast Water and Sediments* (hereinafter referred to as "the Convention"),

RECALLING resolution A.1005(25), and expressing its renewed desire to ensure that the Convention enters into force without further delay so as to provide for accrual of benefits as soon as possible to the aquatic environment from its early, wide and effective implementation,

CONSCIOUS of the need to provide certainty and confidence in the application of the Convention, thereby assisting shipping companies, shipowners, managers and operators, as well as the shipbuilding and equipment manufacturing industries, in the timely planning of their operations and the need to encourage the early installation of ballast water management systems,

RECALLING that the International Conference on Ballast Water Management for Ships adopted regulation B-3 to ensure a smooth transition to the D-2 performance standard of the Convention between the years 2009 and 2019,

RECOGNIZING that the passage of time since adoption of the Convention has resulted in uncertainty for vessels regarding the application of regulation B-3, and that such uncertainty can be mitigated through the application of an appropriate timeline for enforcement of regulation D-1 (ballast water exchange standard) and regulation D-2 (ballast water performance standard), upon entry into force of the Convention,

1. CALLS ON States that have not already done so to ratify, accept, approve or accede to the Convention as soon as possible;

2. RECOMMENDS that, notwithstanding the schedule set forth in regulation B-3, upon entry into force of the Convention, each Party enforce the standards in regulations D-1 and D-2 in accordance with the following schedule:

- .1 a ship subject to regulation B-3.3 or B-3.5, constructed before the entry into force of the Convention, will not be required to comply with regulation D-2 until its first renewal survey following the date of entry into force of the Convention;

- .2 a ship subject to regulation B-3.1.1, B-3.1.2 or B-3.4 will not be required to comply with regulation D-2 until its first renewal survey following the anniversary date of delivery of the ship in the year of compliance with the standard applicable to the ship;
 - .3 notwithstanding paragraph 2.2, where the Convention enters into force after the year 2014, a ship subject to regulation B-3.1.1 will not be required to comply with regulation D-2 until its first renewal survey following the date of entry into force of the Convention;
 - .4 notwithstanding paragraph 2.2, where the Convention enters into force after the year 2016, a ship subject to regulation B-3.1.2 or B-3.4 will not be required to comply with regulation D-2 until its first renewal survey following the date of entry into force of the Convention;
 - .5 a ship referred to in paragraphs 2.1 to 2.4 will be required to comply with either regulation D-1 or D-2 until such time as regulation D-2 is enforced; and
 - .6 the renewal survey referred to in paragraphs 2.1 to 2.4 is the renewal survey associated with the International Oil Pollution Prevention Certificate under MARPOL Annex I;
3. REQUESTS that the Marine Environment Protection Committee keep this resolution under review and report back to the Assembly as appropriate;
4. RECOMMENDS that, as soon as possible after entry into force of the Convention, regulation B-3 be amended consistent with the understanding reflected in paragraph 2 of this resolution, with the date of acceptance of the amendment to occur as soon as practicable after its adoption; and
5. REVOKES resolution A.1005(25).

ANNEX 4

RESOLUTION MEPC.229(65)

Adopted on 17 May 2013

**PROMOTION OF TECHNICAL CO-OPERATION AND TRANSFER OF TECHNOLOGY
RELATING TO THE IMPROVEMENT OF ENERGY EFFICIENCY OF SHIPS**

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization (the Organization) concerning the functions of the Marine Environment Protection Committee (the Committee) conferred upon it by international conventions for the prevention and control of marine pollution from ships,

HAVING ADOPTED, by resolution MEPC.203(62), the amendments to MARPOL Annex VI for inclusion of regulations on energy efficiency for ships,

BEING COGNIZANT of the principles enshrined in the Convention on the Organization, including the principle of non-discrimination, as well as the principle of no more favourable treatment enshrined in MARPOL and other IMO Conventions,

BEING COGNIZANT ALSO of the principles enshrined in the UNFCCC and its Kyoto Protocol including the principle of common but differentiated responsibilities and respective capabilities,

BEING AWARE that Parties to MARPOL Annex VI are expected to give full and complete effect to chapter 4 of MARPOL Annex VI,

1 REQUESTS the Organization, through its various programmes, to provide technical assistance to Member States to enable cooperation in the transfer of energy efficient technologies to developing countries in particular; and further assist in the sourcing of funding for capacity-building and support to States, in particular developing States, which have requested technology transfer;

2 INVITES international and regional organizations, non-governmental organizations and the industry to contribute in any manner possible and as appropriate to enhancing the effective implementation of chapter 4 of MARPOL Annex VI;

3 DECIDES to establish, with full stakeholder participation, an Ad hoc Expert Working Group on facilitation of Transfer of Technology for ships (AHEWG-TT) with a mandate to:

- .1 assess the potential implications and impacts of the implementation of the regulations in chapter 4 of MARPOL Annex VI, in particular, on developing States, as a means to identify their technology transfer and financial needs, if any;

- .2 identify and create an inventory of energy efficiency technologies for ships; identify barriers to transfer of technology, in particular to developing States, including associated costs, and possible sources of funding and make recommendations, including the development of a model agreement enabling the transfer of financial and technological resources and capacity-building between Parties, for the implementation of the regulations in chapter 4 of MARPOL Annex VI; and
 - .3 report to MEPC;
- 4 RECOGNIZES that the transfer of technology needs to respect property rights, including intellectual property rights, and to be on mutually agreed terms and conditions;
- 5 REQUESTS Member States, in cooperation with the Organization and other international bodies, other interested countries and industry programmes, to promote the provision directly, or through the Organization, of support to States, in particular to developing States, that need and request technical assistance for the assessment of the implications of becoming a Party to the regulations in chapter 4 of MARPOL Annex VI;
- 6 URGES also Member States with an ability to do so, and subject to their respective national laws, regulations and policies, to promote the provision directly, or through the Organization, of support especially to developing States and including, but not limited with regard to:
 - .1 transfer of energy efficiency technologies for ships;
 - .2 research and development for the improvement of energy efficiency of ships;
 - .3 training of personnel, for the effective implementation and enforcement of the regulations in chapter 4 of MARPOL Annex VI; and
 - .4 the exchange of information and technical co-operation relating to the improvement of energy efficiency for ships;
- 7 INVITES the Secretary-General of the Organization to make adequate provisions in its integrated Technical Co-operation Programme (ITCP) related to the effective implementation and enforcement of the requirements of chapter 4 of MARPOL Annex VI by developing countries, particularly the Least Developed Countries (LDCs) and Small Islands Developing States (SIDS); and
- 8 AGREES to keep under review the implementation of measures for the promotion of technical cooperation related to the energy efficiency of ships, as set out in this resolution.

ANNEX 5

**STATEMENTS BY THE CHAIRMAN OF THE COMMITTEE AND DELEGATIONS
OF ARGENTINA, AUSTRALIA, BRAZIL, CANADA, CHILE, CHINA,
DENMARK, JAPAN, INDIA, THE NETHERLANDS, NIGERIA,
NORWAY, PERU, SAUDI ARABIA, THE UNITED KINGDOM,
THE UNITED STATES AND VENEZUELA
ON
RESOLUTION MEPC.229(65) ON PROMOTION OF TECHNICAL CO-OPERATION
AND TRANSFER OF TECHNOLOGY RELATING TO THE
IMPROVEMENT OF ENERGY EFFICIENCY OF SHIPS**

Statement by the Chairman of the Committee

You remember yesterday when WP.12 was actually circulated, I said that the Chairman was not happy about the outcome of the working Group and what is reflected in the WP.12. I also said that although I was planning to bring to you a way forward, which would have been very painful everybody, I would have changed my mind of being heartless as always and become slightly nicer, if someone informed me that something that was going on to find a solution.

It looks like it was my lucky day because instead of one I got 12 delegations approaching me, which actually they did not say they had anything from their magic card, but they asked me if I could act as I did in the past and try to be an envoy or a facilitator in order to help and find the solution.

And you take for granted that's why you elected a chairman to work with you and to find the solutions with you in an amicable way without too many problems or least a solution that we can all live with it the one way or the other.

First of all allow me to congratulate the Chairman of the WG and its participation for the excellent work they did, and of course for having such and efficient working paper report which is only one paragraph. And I congratulate the drafters of that paragraph. But when I got the request, I went back to the Chairman and I asked "did you do anything on the process?" he replied "we agreed everything", so where is the problem? I asked, the reply was that the problem lies with some issues relating to the principles of several things such as IMO Convention principles, the no more favourable treatment, the UNFCCC and its Kyoto Protocol and so on.

I convened a meeting at 4 o'clock; I gave some options; I got a little input because I didn't have too much time and gathering the information I had from the Chair and that little information I got from that little group at 4 o'clock, I came to the conclusion that as far as what we have to do with the technical co-operation, technology transfer is there. It was agreed, The problem was just a place holder for something missing. So I thought that it would be very unfair to everybody to drop their work and start from scratch, so I told them that I will use the paragraphs you have, and I will only concentrate to find a solution on the placeholder, which today, you have in front of you as bold black letters in this J/10 and its 2 paragraphs which both of them begin with the expression "Being Cognizant".

We started with a white sheet of paper, we spell out the principles, all of the principles we wanted to discuss and then we tried to connect them together. And then all of us in a very swift way we said, its brilliant up to now, but let's make it 2 paragraphs., so we can see actually what we are saying. That's why you have got 2 instead of one and we connected them all together and we were very quick actually to find out that "being cognizant" and "cognizant also" could work as the operative word for those 2 paragraphs. That happened at 7 o'clock.

We did not reach a conclusion until quarter to eleven, although the principles were connected together, in one way or the other. We have connected them grammatically correct in my opinion. But unfortunately, not the whole group could feel comfortable with the word "of". So we had one word of 2 letters and we were going around in different ways to express ourselves, we have red line on the one, green line on the other, you know this process. Eventually, we reached 10.15, where honestly, I have to say, I reached the point that I usually don't reach, but I was exhausted as I didn't have lunch and dinner.

But one delegation, I don't like to name delegations at this stage, mentioned something that on the 1st round, of replies it sounded as the solution; that could solve our problems and that was the word "enshrined". For some of you it might be a little bit difficult to read or say the word enshrined, but it is a word that has its own connotations, but it actually captured the essence that these principles are within somewhere. When I saw that the 1st thing I said, what we try to do here is to actually state the status quo and the obvious, what is actually happening, whether it is in the IMO, whether it is in the framework convention on climate change, so let's be factual and everybody agreed on that. But then again we started going in circles, so when I reached the stage when I couldn't go any further, I said to the group "this time you are not the friends of Chairman that I consult with you and then I put something in front of the Committee. This time you asked me to come and help you. So the point we reached now, you have to allow me to go to the Committee with something that I think will work because, it does, it tells you the truth, it does tell you what is written/spelt out in this Convention. It's a boxing kind of connection between the principles. We know which principle is where, and everybody can understand their own thing. And then I got silence.

When I got silence, you know me, I do use silence very much, because the sign of silence means we might not like it, but we might let you go. So I picked it up, I went to Stefan's office and with Fredrik of course, we drafted it. I wanted to find Mr. Zhu, but it was too late in the night, but I found him this morning. And I do believe that I have in front of you now, something which on this specific agenda item, can be accepted with silence. I do believe that we have been working on it for so long. I am not going to call it my plea, it's my terrible plea you accept it, and adopt it with acclamation. What I mean by acclamation is we agree on it with silence, I will clap. It is my last session I can do whatever I want.

And that ends my presentation of the document, and of course the floor is yours. But the sound of silence would have been my preferred option.

Statement by the delegations of Australia, Japan and the United States

Thank you, Chair. I have the honour of making this statement on behalf of Australia, Japan and the United States. We would like to thank you and your vice chair for all your hard work to reach agreement. We believe it should be worth your effort, as it will allow us to move forward constructively on the important substantive work we have before us.

We support the actions called for in this resolution. We will implement our commitments under regulation 23. We have always been committed to providing capacity-building and technical assistance to enhance energy efficiency of ships, and we will actively engage in the Ad Hoc Expert Working Group on Transfer of Technology for ships to assess and raise awareness of available energy efficiency technologies.

We move forward on the basis of the Chair's understanding that the fourth preambular paragraph expresses awareness that the UN Framework Convention on Climate Change contains principles relevant to that Convention. Of course, in the IMO and under MARPOL, the principles of non-discrimination and no-more-favourable-treatment apply.

In addition- and on this point I speak only on behalf of the United States- as a country that is implementing its commitments under the UNFCCC but is not a Party to the Kyoto Protocol, the United States would not associate with the reference to the Kyoto Protocol in this paragraph. In our view, the reference does not make factual sense, because the Kyoto Protocol does not actually contain principles. We interpret the reference to mean the principles of the UNFCCC, under which the Kyoto Protocol falls.

In closing, we all look forward to working constructively with all countries to enhance their effective implementation of the regulations we adopted at MEPC 62, and in the new working group on energy efficiency at MEPC 66.

Statement by the delegation of Brazil

Thank you, Mr Chairman,

We would like, firstly, to show our great appreciation to you Chair and your Vice-Chair, for your outstanding abilities in bringing Parties together.

We would also like to thank other Parties for the constructive spirit they have conducted the matter.

Brazil welcomes the adoption of the resolution on technical cooperation and transfer of technology by the Committee.

The express cognizance of the principles and provisions of the UNFCCC and its Kyoto Protocol, in particular the principle of common but differentiated responsibilities, is an important step for ensuring consistency of climate change actions under IMO, in relation to the international climate change regime.

It provides, further, a clear signal that this Organization renders its full support to the international response to climate change and to the UNFCCC process, which is particularly relevant to the Durban Platform on Enhanced Action, to conclude the 2015 agreement under that Convention, applicable to all Parties.

Mr Chairman,

We now enter a phase for the implementation of the technical and operational measures we have already adopted. We must focus on this challenge. We urge developed countries to provide the necessary financial, technological and capacity-building support for developing countries, in relation to energy efficiency standards.

We align ourselves to the statement presented by China.

Thank you.

Statement by the delegation of Canada

Like others, Canada would like to express appreciation for the hard work of all the delegations on this resolution, and especially the work by the Vice Chair.

As others have stated, Canada takes the operative substance of this resolution seriously. Even before today and before the adoption of this resolution, Canada has been working with Finland and other countries and the IMO Secretariat on moving forward with capacity-building activities, building on the excellent work of KOICA and the IMO Secretariat. And we will continue to do so. We welcome the participation of any other States in this initiative.

We also wish to associate ourselves with the statement of the United States.

Statement by the delegation of Chile

Our delegation congratulates the Chairman and Vice-Chairman on their work in guiding our efforts to achieve a consensus and the resolution now before us.

We feel sure that this resolution opens a new chapter in the history of the Organization. Our delegation is very satisfied with the content of the document under review, which reflects the spirit of cooperation that must prevail in this Organization.

Statement by the delegation of China

This delegation would like to express our appreciation to the two chairmen on their great effort in promoting the finalization of this MEPC resolution. We would also like to thank all the delegations for their spirit of consensus on negotiation and their huge compromise and flexibility in the consultation. To be honest, many delegations, including China, are not completely satisfied with this resolution, because concession has been made by all delegations. This delegation is particularly concerned about the provisions on Intellectual Property Rights (IPR) contained in this resolution because protection of IPR has always been the formidable obstacle which seriously impairs the transfer of technology. This delegation sincerely hopes that all member states, in the spirit of continuous co-operation, can faithfully fulfil the obligations of technology transfer in accordance with this resolution so that this resolution, adopted after two-year consideration, will not become a mere sheet of paper. This resolution, for the first time introducing the principle of common but differentiated responsibilities (CBDR) into IMO, provides a sound foundation and guidance for further discussion on GHG emission under IMO. This delegation would like to actively participate in related discussion under the guidance of this principle.

Lastly, Mr. Chairman, this delegation would like to express our appreciation to delegations of the United States and Denmark, as well as other member states with the same position, for their co-operative spirit and flexible attitude for the consensus. We hope that the spirit of mutual compromise and close co-operation would be kept in further discussions on GHG emission under IMO in future.

Thank you, Sir!

Statement by the delegations of Denmark, the Netherlands and the United Kingdom

Denmark, Netherlands and the United Kingdom are appreciative of the efforts which have been taken, both by you Mr. Chairman, the new chairman of the Committee and Member States to reach a result which has finalized the resolution on Technical Co-operation.

We support the resolution in general and welcomes its operative paragraphs on technical cooperation, intended to give support to IMO Member States that request assistance in the implementation of the new MARPOL requirements on EEDI for new ships, in particular developing States.

We underline that the support for the Resolution can in no way be seen as an acceptance that other principles than those enshrined in the IMO Convention and other conventions under IMO, including the MARPOL Convention, shall govern the work in IMO and does not accept that the UNFCCC principles, such as that of Common But Differentiated Responsibilities and Respective Capabilities that are currently applied under the UNFCCC and its Kyoto Protocol, shall be used in IMO regulations.

Nor shall support for the Resolution pre-empt any discussions in the UNFCCC on the principles governing the work in that setting.

We are pleased that we have finalized the resolution and encourage all states that have the ability to do so to participate actively in finding solutions to the requests for technical assistance that may arise.

Statement by the delegation of India

Respected Mr. Chairman, distinguished delegates from Member States,

At the outset, India congratulates you, Mr. Chairman, and the Chairman of the Working Group Mr. Arsenio Dominguez for your able leadership, without which this Resolution for Technology Transfer and Capacity Building would never have been materialized. Though we also have come far away from our initial position on the issue, our agreement to this resolution is India's endorsement of the views of this organization, that 'sustainable development', is the only way forward for the international community to address the current climate change issues.

We also thank the member states, particularly the developed states for recognising that the reference to the UNFCCC and the CBDR in the resolution are essential for the effective implementation of the GHG emission control measures, being ambitiously promulgated by world community, including the IMO.

Distinguished delegates, by accepting UNFCCC and CBDR, we are only recognizing the historical realities of contrasting contributions of the developed and the developing countries to global environmental problems and the undeniable differences in the economic and technical capacities of both these groups of countries to address the climate related issues. This has been the position of India in all fora of climate change negotiations, which now stands vindicated in this floor as well.

However, we are still apprehensive of the extent to which, the spirit of this resolution is going to be transformed to reality. Hence, India strongly requests the Organization to put in place effective mechanisms to continuously assess and monitor the effectiveness of implementation of this resolution, so that the support materially reaches the entitled developing nations.

Climate Change negotiations are taking place against the backdrop of an increasingly globalized and interdependent world economy. Development must, therefore, remain at the centre of the global discourse and should not impose conditionalities or additional burdens on developing countries. It must not sharpen the division of the world between an affluent North and an impoverished South, and justify this with a green label.

It is India's view that the planetary atmospheric space is a common resource of humanity and each citizen of the globe has an equal entitlement to that space. The principle of equity, therefore, implies that, over a period of time, there should be a convergence in per capita emissions.

Mr. Chairman, India believes that with the adoption of this resolution, at least in this present form is our first collective step towards this. We hope that the implementation of this resolution will also take place in the same spirit.
Thank You Mr. Chairman.

Statement by the delegation of Nigeria

Mr Chairman

You are really a true magician!

Nigeria delegation wants to appreciate your very good efforts, and the Chairman of the Working Group. We also want to thank the Secretariat for working so hard into the late night.

We welcome and support the Resolution.

We hope this good spirit of give and take among member States will continue to prosper in this Organisation.

Thank you!

Statement by the delegation of Norway

Mr. Chairman,

Norway wants to express sincere thanks to everyone which has been involved in the development of this resolution. I think yet again this Organisation set an excellent standard for the true global co-operation. Allow me also to express thanks to our elected chairman Aresnio Domingez and you Mr. Chairman. This would not be possible without your extensive efforts. We also want to express thanks to South Africa for a brave proposal submitted to this session. Allow me also to express my special thanks to Ambassador Marcos Pinto Gama of Brazil which engaged in a fruitful intersessional cooperation with me.

Sir, the adaption of this resolution represents also adaption of a better climate for cooperation on reduction of GHG emissions form international shipping.

Thank you Mr. Chairman.

Statement by the delegation of Peru

Thank you Mr. President,

The delegation of Peru would like to emphasize that, as a country highly vulnerable to the harmful effects of climate change, Peru considers itself to be, and is, fully committed to the multilateral efforts to reach a binding, far-reaching and effective agreement in keeping with the United Nations Framework Convention on Climate Change. The recent approval, by acclamation, of the draft resolution on promotion of technical cooperation and transfer of technology fills us with optimism for continuation of the work to develop concrete measures to reduce greenhouse gas emissions.

We should also like to join in the acknowledgement and thanks expressed for the leadership shown by the Chairman and Vice-Chairman, for the climate of cooperation and friendship among the delegations and for the healthy exchanges of opinion with delegates from each of the groups.

Statement by the delegation of Saudi Arabia

We would like to thank the chairman of the working group and all members for their hard work. We understand that all members, including Saudi Delegation, did not hold on their initial position on this issue in order to succeed in adopting this resolution. We look forward to working with the IMO to give effect to this resolution respecting all principles stated in it.

Statement by the delegation of Venezuela

Thank you Mr. President,

I believe that the position of Venezuela has been more than clear and its concerns about the history of the actions taken on this matter from the outset are very much in line with what has been said by China. We acknowledge the great efforts made by all parties and have maintained our commitment to lending our support to bring about the best outcome for all parties. We should all now congratulate ourselves on the tremendous effort made by everyone involved – Secretariat, Member States and Committee officers – and on the impeccable leadership of the Chairman and Vice-Chairman, which has helped us achieve clear and tangible progress on this matter. I say this because we are only at the beginning of the road, and it will be actions that dictate and define what we do in the future, giving due weight to the United Nations Framework Convention on Climate Change and the Kyoto Protocol, which are the only universal binding instruments in matters relating to climate change. Lastly, we support Argentina's comment on correct translation of the term in document MEPC 65/J/10.

Statement by the delegation of Argentina

The Argentine delegation wishes to state that, following previous problems with translations of documents, it should be noted that the word "enshrined" in English is translated as "consagrado(s)" in Spanish.

Thank you

ANNEX 6

STATEMENTS BY THE DELEGATIONS OF CHINA AND THE RUSSIAN FEDERATION ON THE IMPACT ON THE ARCTIC OF EMISSIONS OF BLACK CARBON

Statement by the delegation of the Russian Federation

The Russian Federation would like to thank Norway for the submitted document MEPC 65/4/22.

The Russian Federation, as one of the Arctic states, conducts a systematic policy to increase the safety of navigation in the Arctic region, including in the water of the Northern Sea Route, and the protection of the Arctic marine environment. The Russian Federation actively participates in relevant working bodies of the Arctic Council.

In this regard, we would like to draw attention to the fact that the submitted report/analysis by Arctic Monitoring and Assessment Program (AMAP) didn't consider at the Working Group of the Arctic Council for the Protection of the Marine Environment (PAME). Namely, in the framework of PAME the shipping experts of the Arctic Council countries participate and held discussions on the implementation of the recommendations of the Arctic Marine Shipping Assessment (AMSA) which was approved at the Ministerial Meeting of the Arctic Council in 2009.

The emissions of black carbon from international shipping have been considered at the first PAME meeting in 2013. It was no reach the consensus that urgent action is needed to reduce these emissions from international shipping in the Arctic.

In the record of the decision of PAME I-2013 all Arctic Council countries encourages continued scientific research related to Black Carbon emissions including with respect to a technical definition of "Black Carbon" and appropriate measurement methods and control measures.

BLG Sub-Committee already has a request of MEPC to consider the issue. However, so far no agreement on the definition of "black carbon" as well as appropriate measures measurement and control of these emissions. We believe that to begin with it is necessary to complete the above task. The interpretation of any research concerning the emissions from shipping should be conducted on the basis of the agreed conclusions of the task in question.

In this regard, we believe that any conclusions about the need for "urgent measures" as well as consideration of the potential mitigation action of BC are premature. We support the transfer this matter to a BLG Sub-Committee for further consideration.

Thank you for your attention!

Statement by the delegation of China

China understands that the discussion on the black carbon issue was originated from document MEPC 60/4/24, where it states that "shipping is a contributor to black carbon emissions, and because shipping traffic in the Arctic is expected to grow substantially ...". At MEPC 61, MEPC 64 and BLG Sub-Committee meetings, the discussion on the black carbon issue was limited to "black carbon emissions by shipping in the Arctic Region". In addition, black carbon has a much shorter atmospheric lifetime, emissions by ships out of the Arctic Region could hardly have any impact in the Region, therefore, the discussion on the black carbon issue by the BLG Sub-Committee should be limited to "the impact of black carbon emissions by ships operating in the Arctic Region".

The delegation of China stated that consideration of black carbon at previous MEPC and BLG meetings has been limited to "black carbon emissions by shipping in the Arctic Region". China proposed that discussion of black carbon at BLG 18 Sub-Committee should be limited to "the impact of black carbon emissions by ships operating in the Arctic Region".

ANNEX 7

DRAFT AMENDMENTS TO THE TECHNICAL CODE ON CONTROL OF EMISSION OF NITROGEN OXIDES FROM MARINE DIESEL ENGINES (NO_x TECHNICAL CODE 2008)

- 1 In abbreviations, subscripts and symbols, table 4 is replaced by the following:

Table 4 – Symbols for fuel composition

Symbol	Definition	Unit
W_{ALE}^*	H content of fuel	% m/m
W_{BET}^*	C content of fuel	% m/m
W_{GAM}	S content of fuel	% m/m
W_{DEL}^*	N content of fuel	% m/m
W_{EPS}^*	O content of fuel	% m/m
α	Molar ratio (H/C)	1

* Subscripts "_G" denotes gas fuel fraction.
"_L" denotes liquid fuel fraction.

- 2 Paragraph 1.3.10 is replaced by the following:

"1.3.10 *Marine diesel engine* means any reciprocating internal combustion engine operating on liquid or dual fuel, to which regulation 13 applies, including booster/compound systems if applied.

Where an engine is intended to be operated normally in the gas mode, i.e. with the main gas fuel and only a small amount of liquid pilot fuel, the requirements of regulation 13 have to be met only for this operation mode. Operation on pure liquid fuel resulting from restricted gas supply in cases of failures shall be exempted for the voyage to the next appropriate port for the repair of the failure."

- 3 The existing paragraph 5.3.4 is deleted.

- 4 New paragraphs 5.3.4, 5.3.5 and 5.3.6 are added after the existing paragraph 5.3.3 as follows:

"5.3.4 The selection of gas fuel for testing for dual fuel depends on the aim of tests. In case where an appropriate standard gas fuel is not available, other gas fuels shall be used with the approval of the Administration. A gas fuel sample shall be collected during the test of the parent engine. The gas fuel shall be analysed to give fuel composition and fuel specification.

5.3.5 Gas fuel temperature shall be measured and recorded together with the measurement point position.

5.3.6 Gas mode operation of dual fuel engines using liquid fuel as pilot or balance fuel shall be tested using maximum liquid-to-gas fuel ratio, such maximum ratio means for the different test cycle modes the maximum liquid-to-gas setting certified. The liquid fraction of the fuel shall comply with 5.3.1, 5.3.2 and 5.3.3."

- 5 A new sentence is added at the end of existing paragraph 5.12.3.3 as follows:

"In case of using dual fuel, the calculation shall be in accordance with paragraphs 5.12.3.1 to 5.12.3.3. However, q_{mf} , w_{ALF} , w_{BET} , w_{DEL} , w_{EPS} , f_{fw} values shall be calculated in accordance with the following table."

Factors in the formula (6) (7) (8)		Formula for factors
q_{mf}	=	$q_{mf_G} + q_{mf_L}$
w_{ALF}	=	$\frac{q_{mf_G} \times w_{ALF_G} + q_{mf_L} \times w_{ALF_L}}{q_{mf_G} + q_{mf_L}}$
w_{BET}	=	$\frac{q_{mf_G} \times w_{BET_G} + q_{mf_L} \times w_{BET_L}}{q_{mf_G} + q_{mf_L}}$
w_{DEL}	=	$\frac{q_{mf_G} \times w_{DEL_G} + q_{mf_L} \times w_{DEL_L}}{q_{mf_G} + q_{mf_L}}$
w_{EPS}	=	$\frac{q_{mf_G} \times w_{EPS_G} + q_{mf_L} \times w_{EPS_L}}{q_{mf_G} + q_{mf_L}}$

- 6 Table 5 is replaced by the following:

"Table 5 – Coefficient u_{gas} and fuel-specific parameters for raw exhaust gas

Gas		NO _x	CO	HC	CO ₂	O ₂
ρ_{gas} kg/m ³		2.053	1.250	*	1.9636	1.4277
	ρ_e †	Coefficient u_{gas} ‡				
Liquid fuel**	1.2943	0.001586	0.000966	0.000479	0.001517	0.001103
Rapeseed Methyl Ester	1.2950	0.001585	0.000965	0.000536	0.001516	0.001102
Methanol	1.2610	0.001628	0.000991	0.001133	0.001557	0.001132
Ethanol	1.2757	0.001609	0.000980	0.000805	0.001539	0.001119
Natural gas	1.2661	0.001621	0.000987	0.000558	0.001551	0.001128
Propane	1.2805	0.001603	0.000976	0.000512	0.001533	0.001115
Butane	1.2832	0.001600	0.000974	0.000505	0.001530	0.001113

* Depending on fuel.

** Petroleum derived.

† ρ_e is the nominal density of the exhaust gas.

‡ At $\lambda = 2$, wet air, 273 K, 101.3 kPa."

Values for u given in table 5 are based on ideal gas properties.

In multiple fuel type operation the u_{gas} value used shall be determined from the values applicable to those fuels in the table set out above proportioned in accordance to the fuel ratio used.

- 7 Paragraph 6.3.1.4 is replaced by the following:

"6.3.1.4 In practical cases, it is often impossible to measure the fuel oil consumption once an engine has been installed on board a ship. To simplify the procedure on board, the results of the measurement of the fuel oil consumption from an engine's pre-certification test-bed testing may be accepted. In such cases, especially concerning residual fuel oil operation (RM-grade fuel oil according to

ISO 8217:2005) and dual fuel operation, an estimation with a corresponding estimated error shall be made. Since the fuel oil flow rate used in the calculation (q_{mf}) must relate to the fuel oil composition determined in respect of the fuel sample drawn during the test, the measurement of q_{mf} from the test-bed testing shall be corrected for any difference in net calorific values between the test bed and test fuel oils and gases. The consequences of such an error on the final emissions shall be calculated and reported with the results of the emission measurement."

8 Table 6 is replaced by the following:

"Table 6 – Engine parameters to be measured and recorded

Symbol	Term	Unit
H_a	Absolute humidity (mass of engine intake air water content related to mass of dry air)	g/kg
$n_{d,i}$	Engine speed (at the i^{th} mode during the cycle)	min ⁻¹
$n_{turb,i}$	Turbocharger speed (if applicable) (at the i^{th} mode during the cycle)	min ⁻¹
P_b	Total barometric pressure (in ISO 3046-1:1995: $p_x = P_x$ = site ambient total pressure)	kPa
$P_{c,i}$	Charge air pressure after the charge air cooler (at the i^{th} mode during the cycle)	kPa
P_i	Brake power (at the i^{th} mode during the cycle)	kW
$q_{mf,i}$	Fuel oil (in case of dual fuel engine, it would be fuel oil and gas) (at the i^{th} mode during the cycle)	kg/h
s_i	Fuel rack position (of each cylinder, if applicable) (at the i^{th} mode during the cycle)	
T_a	Intake air temperature at air inlet (in ISO 3046-1:1995: $T_x = TT_x$ = site ambient thermodynamic air temperature)	K
$T_{SC,i}$	Charge air temperature after the charge air cooler (if applicable) (at the i^{th} mode during the cycle)	K
T_{caciin}	Charge air cooler, coolant inlet temperature	°C
$T_{caciout}$	Charge air cooler, coolant outlet temperature	°C
$T_{Exh,i}$	Exhaust gas temperature at the sampling point (at the i^{th} mode during the cycle)	°C
T_{Fuel}	Fuel oil temperature before the engine	°C
T_{Sea}	Seawater temperature	°C
$T_{Fuel\ G}^*$	Gas fuel temperature before the engine	°C

* only for dual-fuel engine."

9 New paragraph 6.3.4.3 is added after existing paragraph 6.3.4.2 as follows:

"6.3.4.3 In case of dual fuel engine, the gas fuel used shall be the gas fuel available on board."

10 Paragraph 6.3.11.2 is replaced by the following:

"6.3.11.2 The NO_x emission of an engine may vary depending on the ignition quality of the fuel oil and the fuel-bound nitrogen. If there is insufficient information available on the influence of the ignition quality on the NO_x formation during the combustion process and the fuel-bound nitrogen conversion rate also depends on the engine efficiency, an allowance of 10 per cent may be granted for an on board test run carried out on an RM-grade fuel oil (ISO 8217:2005), except that there will be no allowance for the pre-certification test on board. The fuel oil and gas fuel used shall be analysed for its composition of carbon, hydrogen, nitrogen, sulphur and, to the extent given in (ISO 8217:2005) and (ISO 8178-5:2008), any additional components necessary for a specification of the fuel oil and gas fuel."

11 Table 9 is replaced by the following:

"Table 9 – Default fuel oil parameters

	Carbon	Hydrogen	Nitrogen	Oxygen
	<i>W_{BET}</i>	<i>W_{ALF}</i>	<i>W_{DEL}</i>	<i>W_{EPS}</i>
Distillate fuel oil (ISO 8217:2005, DM grade)	86.2%	13.6%	0.0%	0.0%
Residual fuel oil (ISO 8217:2005, RM grade)	86.1%	10.9%	0.4%	0.0%
Natural gas	75.0%	25.0%	0.0%	0.0%

For other fuel oils, default value as approved by the Administration."

12 New paragraph 2.5 is added after existing paragraph 2.4 in appendix VI as follows:

"2.5 q_{mf} , W_{ALF} , W_{BET} , W_{DEL} , W_{EPS} , f_d parameters, in formula (1), in case of gas mode operation of dual fuel engine, shall be calculated as follows:"

Factors in formula (1)		Formula of factors
q_{mf}	=	$q_{mf_G} + q_{mf_L}$
W_{ALF}	=	$\frac{q_{mf_G} \times W_{ALF_G} + q_{mf_L} \times W_{ALF_L}}{q_{mf_G} + q_{mf_L}}$
W_{BET}	=	$\frac{q_{mf_G} \times W_{BET_G} + q_{mf_L} \times W_{BET_L}}{q_{mf_G} + q_{mf_L}}$
W_{DEL}	=	$\frac{q_{mf_G} \times W_{DEL_G} + q_{mf_L} \times W_{DEL_L}}{q_{mf_G} + q_{mf_L}}$
W_{EPS}	=	$\frac{q_{mf_G} \times W_{EPS_G} + q_{mf_L} \times W_{EPS_L}}{q_{mf_G} + q_{mf_L}}$

ANNEX 8

MEPC RESOLUTION MEPC.230(65)

Adopted on 17 May 2013

**2013 GUIDELINES AS REQUIRED BY REGULATION 13.2.2 OF
MARPOL ANNEX VI IN RESPECT OF NON-IDENTICAL
REPLACEMENT ENGINES NOT REQUIRED
TO MEET THE TIER III LIMIT**

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee (the Committee) conferred upon it by international conventions for the prevention and control of marine pollution,

RECALLING ALSO that, at its fifty-eighth session, the Committee adopted, by resolution MEPC.176(58), a revised MARPOL Annex VI (hereinafter referred to as "MARPOL Annex VI") which significantly strengthens the emission limits for nitrogen oxides (NO_x) in light of technological improvements and implementation experience,

NOTING that regulation 13.2.2 of MARPOL Annex VI specifies which NO_x emission standard shall be applied when a marine diesel engine is replaced with a non-identical marine diesel engine,

RECOGNIZING the need to develop guidelines to set forth the criteria of when it is not possible for a replacement engine to meet the standards in regulation 13.5.1.1 (Tier III),

HAVING CONSIDERED, at its sixty-fifth session, the guidelines as required by regulation 13.2.2 in respect of non-identical replacement engines not required to meet the Tier III limit, proposed by the Sub-Committee on Bulk Liquids and Gases at its seventeenth session,

1. ADOPTS the Guidelines as required by regulation 13.2.2 in respect of non-identical replacement engines not required to meet the Tier III limit, as set out at annex to the present resolution;
2. INVITES Administrations to take the annexed Guidelines into account when certifying a marine diesel engine which is replaced with a non-identical marine diesel engine;
3. REQUESTS the *Parties* to MARPOL Annex VI and other Member Governments to bring the annexed Guidelines to the attention of shipowners, ship operators, shipbuilders, marine diesel engine manufacturers, and any other interested groups; and
4. AGREES to keep these Guidelines under review in light of the experience gained.

**GUIDELINES AS REQUIRED BY REGULATION 13.2.2 IN RESPECT OF
NON-IDENTICAL REPLACEMENT ENGINES NOT REQUIRED
TO MEET THE TIER III LIMIT**

1 When it becomes necessary to replace an engine to which regulation 13 of MARPOL Annex VI applies in principle (power output of more than 130 kW) the non-identical replacement engine shall comply with the standards set forth in paragraph 5.1.1 of the respective regulation (Tier III) when operating in an area designated under regulation 13.6 of MARPOL Annex VI if the replacement takes place on or after 1 January 2016 unless:

- .1 a replacement engine of similar rating complying with Tier III is not commercially available; or
- .2 the replacement engine, in order to be brought into Tier III compliance, needs to be equipped with a NO_x reducing device which due to:
 - .1 size cannot be installed in the limited space available on board; or
 - .2 extensive heat release could have adverse impact on the ships structure, sheeting, and/or equipment whilst additional ventilation and/or insulation of the engine-room/compartment will not be possible.

2 In making the determination that a Tier III engine is not a feasible replacement engine for a ship, it should be necessary to evaluate not just engine dimensions and weight but may also include other pertinent ship characteristics. These pertinent characteristics could include:

- .1 downstream ship components such as drive shafts, reduction gears, cooling systems, exhaust and ventilation systems, and propeller shafts;
- .2 electrical systems for diesel generators (indirect drive engines); and
- .3 such other ancillary systems and ship equipment that would affect the choice of an engine.

3 Restrictions should also be considered concerning engine adjustment/matching needed to meet boundary conditions and performance data necessary for SCR operation at all relevant mode points.

4 If the replacement engine is part of a multi-engine (twin-engine) arrangement and it is replacing an engine that is not a Tier III compliant engine due to it having been installed prior to the Tier III implementation date, a need to match a replacement engine within a multi-engine arrangement should be part of the criteria to be considered. In such cases, if it were decided to exempt a replacement engine in multi-engine arrangements it must be clear that is where engines are installed as matched pairs (or more) as propulsion engines and that matching is necessary to ensure comparable manoeuvring/drive response rather than where multiple engines are installed such as in the case of generators.

5 A replacement engine that meets the Tier III limit should be installed provided it does not incur an increase in the ship's electrical demand beyond the installed capacity.

6 In no case should modification to the ship's structure be allowed which weakens its structural stability below the acceptable level.

7 The Administration should consider how far the shipowner's specification of the device will determine whether a non-identical replacement engine is not required to meet the Tier III limit (for example, by requiring an excessive urea storage capacity – relative to bunker capacity – or that the SCR device is not to increase engine weight/volume by more than an unjustifiably low percentage).

8 There may be differences between a Tier III and a Tier II engine that should **not** affect the determination of whether a non-identical replacement engine should not be required to meet the Tier III limit, such as:

- .1 warranty period or life expectancy;
- .2 cost; or
- .3 production lead time.

9 The shipowner should provide evidence to the Administration that a Tier III engine cannot be installed and should report specifically what prevents a Tier III compliant engine from being installed, taking into account the provisions of these guidelines. The shipowner should document the search for compliant Tier III engines and explain why the closest available engine with respect to size or performance is not appropriate for the ship. The search should include engines produced by manufacturers other than the original engine's manufacturer. This documentation, duly endorsed by the Administration, should be kept with the replacement engine's EIAPP Certificate.

ANNEX 9

UNIFIED INTERPRETATION TO REGULATION 13.2.2 OF MARPOL ANNEX VI CONCERNING "TIME OF THE REPLACEMENT OR ADDITION" OF AN ENGINE FOR THE APPLICABLE NO_x TIER STANDARD FOR THE SUPPLEMENT TO THE IAPP CERTIFICATE

Regulation 13

Nitrogen oxides (NO_x)

Regulation 13.2.2 reads as follows:

For a major conversion involving the replacement of a marine diesel engine with a non-identical marine diesel engine or the installation of an additional marine diesel engine, the standards in this regulation in force at the time of the replacement or addition of the engine shall apply.

Interpretation

The term "time of the replacement or addition" of the engine in regulation 13.2.2 of MARPOL Annex VI is to be taken as the date of:

- .1 the contractual delivery date of the engine to the ship^{*}; or
- .2 in the absence of a contractual delivery date, the actual delivery date of the engine to the ship^{*}, provided that the date is confirmed by a delivery receipt; or
- .3 in the event the engine is fitted on board and tested for its intended purpose on or after 1 July 2016, the actual date that the engine is tested on board for its intended purpose applies in determining the standards in this regulation in force at the time of the replacement or addition of the engine.

The date in paragraphs .1, .2 or .3 above, provided the conditions associated with those dates apply, is the "Date of major conversion – According to regulation 13.2.2" to be entered in the IAPPC Supplement. In this case, the "Date of installation", which applies only for identical replacement engines, shall be filled in with "N.A.".

If the engine is delivered in accordance with either paragraphs .1 or .2 above before 1 January 2016 but not tested before 1 July 2016 due to unforeseen circumstances beyond the control of the shipowner, then the provisions of "unforeseen delay in delivery" may be considered by the Administration in a manner similar to MARPOL Annex I UI4.

* The engine is to be fitted on board and tested for its intended purpose before 1 July 2016.

ANNEX 10

UNIFIED INTERPRETATION TO REGULATION 13 OF MARPOL ANNEX VI ON IDENTICAL REPLACEMENT ENGINES

Regulation 13

Nitrogen oxides (NO_x)

Regulation 13.1.1.2 reads as follows:

- "2.2 each marine diesel engine with a power output of more than 130 kW which undergoes a major conversion on or after 1 January 2000 except when demonstrated to the satisfaction of the Administration that such engine is an identical replacement to the engine which it is replacing and is otherwise not covered under paragraph 1.1.1 of this regulation."

Regulation 13.2.2 reads as follows:

- "2.2 For a major conversion involving the replacement of a marine diesel engine with a non-identical marine diesel engine or the installation of an additional marine diesel engine, the standards in this regulation in force at the time of the replacement or addition of the engine shall apply."

Interpretation:

In regulation 13.1.1.2 the term "identical" (and hence, by application of the converse, in regulation 13.2.2 the term "non-identical") as applied to engines under regulation 13 is to be taken as:

An "identical engine" is, as compared to the engine being replaced*, an engine which is of the same:

- design and model;
 - rated power;
 - rated speed;
 - use;
 - number of cylinders;
 - fuel system type (including, if applicable, injection control software); and
- (a) for engines without EIAPP certification, have the same NO_x critical components and settings**; or

- (b) for engines with EIAPP certification, belonging to the same Engine Group/Engine Family.

* In those instances where the replaced engine will not be available to be directly compared with the replacing engine at the time of updating the Supplement to the IAPP Certificate reflecting that engine change it is to be ensured that the necessary records in respect of the replaced engine are available in order that it can be confirmed that the replacing engine represents "an identical engine".

** For engines without EIAPP Certification there will not be the defining NO_x critical component markings or setting values as usually given in the approved Technical File. Consequently in these instances the assessment of "... same NO_x critical components and settings ..." shall be established on the basis that the following components and settings are the same:

Fuel system

- (a) Fuel pump model and injection timing
- (b) Injection nozzle model

Charge air

- (a) Configuration and, if applicable, turbocharger model and auxiliary blower specification
- (b) Cooling medium (seawater/freshwater)

ANNEX 11

STATEMENTS BY THE DELEGATIONS OF THE UNITED STATES AND OBSERVERS FROM EUROMOT AND ICOMIA ON THE REVIEW OF THE STATUS OF THE TECHNOLOGICAL DEVELOPMENTS TO IMPLEMENT TIER III NO_x EMISSION STANDARDS

Statement by the delegation of the United States

Thank you Mr. Chairman.

When the US ratified Annex VI of MARPOL, we did it for two important reasons. First, it assured to provide international shipping one consistent international standard regarding air emissions. Secondly, the emission standards met our environmental needs to protect our citizens.

An important component of Annex VI is the availability of emission control areas, for which we received approval, through this committee, two of them: the North America and United States Caribbean emission control areas.

At the beginning of this session, we took a decision to delay the Tier III NO_x standards in emission control areas by 5 years, from 2016 to 2021. The United States fully acknowledges this decision was correctly taken, but unfortunately, that decision only affects the Tier III NO_x standards in the two approved US emission control areas.

As some might imagine, this has caused us great concern and led to our reservation. Quite frankly we expected the date for Tier III NO_x emissions in emission control areas. There has been significant work undertaken to ensure ships could and would be able to meet the Tier III NO_x standards in our emission control areas by 1 January 2016. Our marine engine industry has heavily invested many millions of US dollars and is prepared to meet the Tier III NO_x standards. This change calls into question this very significant investment.

Therefore, without prejudice and with no suggestion to change the basic decision we reached concerning the date for the Tier III NO_x standards, we are requesting the committee to consider a separate and additional decision.

We are asking the Committee to agree to "grandfather" the date of 1 January 2016 for the only two existing emission control areas with Tier III NO_x standards, which are the two US emission control areas, namely the North America and United States Caribbean areas.

If the Committee agrees with this decision, it would have no impact on any future NO_x emission control areas approved by this committee. And as this only pertains to NO_x, it will have no impact on existing sulfur emission control areas or the global standards for either sulfur or NO_x. This means that for all future NO_x emission control areas, the date for the Tier III NO_x standards would be 1 January 2021, as we agreed.

We also realize that if the Committee agrees, it raises a number of other issues.

We realize that if the Committee agrees with our proposal, it could affect the class of yachts for which the Marshall Islands and the Cook Islands and their co-sponsors had submitted a proposal in document MEPC 65/4/32 to request a delay in the Tier III NO_x standards. As the Committee noted, their request was overtaken by our decision to delay the Tier III

NO_x requirements to 2021. We fully agree that the decision for those yachts identified in the Marshal Islands and Cook Islands must remain at 2021.

Then there is the question of text of the amendments. In that regard, provided the Committee agrees with our proposal, we will submit, more than six months in advance of MEPC 66, the text of the amendments and ensure it is available for all countries to view and evaluate. This will enable all countries to verify that the text does exactly what it is supposed to do and that it is accurate and correct when they come up for adoption at MEPC 66.

We also understand that if the Committee agrees to retain the 2016 date for the North America and United State Caribbean Sea areas for the Tier III NO_x standards, it will impact the industry. As we have done throughout the implementation of these two emission control areas we will continue to work with the industry, including ship owners, operators, designers, builders and flag states to utilize the flexibility as provided in MARPOL Annex VI to ensure the smooth implementation, taking into account the concerns, views and difficulties of the industry.

We hope the Committee can agree with our proposal.

Thank you Mr. Chairman.

Statement by the observer from ICOMIA

Thank you Mr Chairman,

ICOMIA & SYBAss regret the uncertainty in which the recreational yacht sector now finds itself with Tier III likely unresolved until the next MEPC. Designs and tooling especially for Fibre Reinforced Plastic vessels need to be finalised over the next 12 months for new build in 2016 and the continued investment by the engine manufacturers in Tier III installations is open to question during the next year. We need certainty and clarity as soon as possible and would respectfully ask that our Tier III issues as set out MEPC 65/4/8 remain under consideration. Notwithstanding this, we are grateful to the delegation of the United States for their proposal and can support it as a pragmatic way forward.

We request this statement is included in the report of the Committee.

Statement by the observer from EUROMOT

Dear Mr. Chairman, Distinguished Delegates,

EUROMOT as Association of Engine Manufacturers needs of course to address some words to the results reflected in the working paper 14. We followed the discussion regarding the availability of Tier III-Technology in the plenary on Wednesday with incomprehension.

EUROMOT members were convinced that the outcome of the Correspondence Group brought up the result that we as engine manufacturer will keep our promise to the shipping community of having Tier III-Technologies readily available for 2016.

The industry is spending lot of effort and resources in a value of a three digit million US-Dollar amount for developing SCR-Technology, Exhaust Gas Recirculation, Dual Fuel respectively Gas and other technologies.

By the decision on Wednesday, to postpone the Tier III implementation to 2021, the engine manufacturers are severely affected.

With this in mind, it is difficult for the industry to continue with a proactive development of new environmental technologies for the future.

We would like to have our statement reflected in the report to MEPC 65 and can hand it over to the Secretariat.

Thank you Chair

ANNEX 12

DRAFT AMENDMENTS TO MARPOL ANNEX VI (EFFECTIVE DATE FOR TIER III NO_x EMISSION STANDARDS)

Regulation 13

- 1 Regulation 13.2.2 is amended as follow:

"2.2 For a major conversion involving the replacement of a marine diesel engine with a non-identical marine diesel engine or the installation of an additional marine diesel engine, the standards in this regulation in force at the time of the replacement or addition of the engine shall apply. On or after 1 January 2021, in the case of replacement engines only, if it is not possible for such a replacement engine to meet the standards set forth in paragraph 5.1.1 of this regulation (Tier III), then that replacement engine shall meet the standards set forth in paragraph 4 of this regulation (Tier II). Guidelines are to be developed by the Organization to set forth the criteria of when it is not possible for a replacement engine to meet the standards in paragraph 5.1.1 of this regulation."

- 2 Regulation 13.5.1 is amended as follows:

"5.1 Subject to regulation 3 of this annex, the operation of a marine diesel engine that is installed on a ship constructed on or after 1 January 2021:"

Appendix 1

- 3 A footnote in Supplement to International Air Pollution Prevention Certificate (IAPP Certificate) in appendix I is amended as follows:

"Completed only in respect of ships constructed on or after 1 January 2021 that are specially designed, and used solely, for recreational purposes and to which, in accordance with regulation 13.5.2.1, the NO_x emission limit as given by regulation 13.5.1.1 will not apply."

ANNEX 13

DRAFT AMENDMENTS TO MARPOL ANNEX VI

(Extension of the application of the EEDI to LNG carrier, ro-ro cargo ship (vehicle carrier), ro-ro cargo ship, ro-ro passenger ship and cruise passenger ship having non-conventional propulsion and exemption of ships not propelled by mechanical means and cargo ships having ice-breaking capacity)

Regulation 2

- 1 Paragraph 2.26 is amended and new paragraphs 2.38 to 2.42 are added as follows:
- 26 *Gas carrier* means a cargo ship, other than LNG carrier as defined in paragraph 38, constructed or adapted and used for the carriage in bulk of any liquefied gas.
- 38 *LNG carrier* means a cargo ship constructed or adapted and used for the carriage in bulk of liquefied natural gas (LNG):
- .1 for which the building contract is placed on or after [date of entry into force]; or
 - .2 in the absence of a building contract, the keel of which is laid or which is at a similar stage of construction on or after six months after [date of entry into force]; or
 - .3 the delivery of which is on or after 48 months after [date of entry into force].
- 39 *Cruise passenger ship* in relation to chapter 4 means a passenger ship not having a cargo deck, designed exclusively for commercial transportation of passengers in overnight accommodations on a sea voyage.
- 40 *Conventional propulsion* in relation to chapter 4 means a method of propulsion where a main engine is the prime mover and coupled to a propulsion shaft either directly or through a gear box.
- 41 *Non-conventional propulsion* in relation to chapter 4 means a method of propulsion, other than conventional propulsion, including diesel-electric propulsion, turbine propulsion, and hybrid propulsion systems.
- 42 *Cargo ship having ice-breaking capability* in relation to chapter 4 means a cargo ship which is designed to break level ice independently with a speed of at least 2 knot when the level ice thickness is 1.0 m or more having ice-bending strength at least 500 kPa.

Regulation 19

2 A new subparagraph 19.2.2 is added as follows:

"2 ships not propelled by mechanical means, and platforms including FPSOs and FSUs and drilling rigs, regardless of their propulsion."

3 Paragraph 19.3 is amended as follows;

"3 Regulations 20 and 21 shall not apply to ships which have non-conventional propulsion. However, regulations 20 and 21 shall apply to cruise passenger ships having non-conventional propulsion and LNG carriers having conventional or non-conventional propulsion, constructed on or after [date of entry into force]. Regulations 20 and 21 shall not apply to cargo ships having ice-breaking capability".

Regulation 20

4 Paragraph 20.1 is replaced as follows:

"1 The attained EEDI shall be calculated for:

.1 each new ship;

.2 each new ship which has undergone a major conversion; and

.3 each new or existing ship which has undergone a major conversion, that is so extensive that the ship is regarded by the Administration as a newly constructed ship,

which falls into one or more of the categories in regulations 2.25 to 2.35, 2.38 and 2.39 of this annex. The attained EEDI shall be specific to each ship and shall indicate the estimated performance of the ship in terms of energy efficiency, and be accompanied by the EEDI technical file that contains the information necessary for the calculation of the attained EEDI and that shows the process of calculation. The attained EEDI shall be verified, based on the EEDI technical file, either by the Administration or by any organization duly authorized by it*."

Regulation 21

5 Paragraph 21.1 is replaced as follows:

"1 For each:

.1 new ship

.2 new ship which has undergone a major conversion; and

* Refer to the *Guidelines for the authorization of organizations acting on behalf of the Administration*, adopted by the Organization by resolution A.739(18), as may be amended by the Organization, and the *Specifications on the survey and certification functions of recognized organizations acting on behalf of the Administration*, adopted by the Organization by resolution A.789(19), as may be amended by the Organization.

- .3 new or existing ship which undergone a major conversion that is so extensive that the ship is regarded by the Administration as a newly constructed ship

which falls into one of the categories in regulation 2.25 to 2.31, 2.33 to 2.35, 2.38 and 2.39 and to which this chapter is applicable, the attained EEDI shall be as follows;

$$\text{Attained EEDI} \leq \text{Required EEDI} = (1-X/100) \times \text{reference line value}$$

Where X is the reduction factor specified in table 1 for the required EEDI compared to the EEDI Reference line."

6 New rows are added to Table 1 in regulation 21.2 for ro-ro cargo ships (vehicle carrier), LNG Carrier, cruise passenger ship having non-conventional propulsion, ro-ro cargo ships and ro-ro passenger ships, and mark ** and *** and their explanations are added, as follows:

Ship Type	Size	Phase 0 1 Jan 2013 – 31 Dec 2014	Phase 1 1 Jan 2015 – 31 Dec 2019	Phase 2 1 Jan 2020 – 31 Dec 2024	Phase 3 1 Jan 2025 and onwards
LNG Carrier***	10,000 DWT and above	n/a	10**	20	30
Ro-ro cargo ship (vehicle carrier)***	10,000 DWT and above	n/a	5**	15	30
Ro-ro cargo ship***	2,000 DWT and above	n/a	5**	20	30
	1,000 – 2,000 DWT	n/a	0-5* **	0-20*	0-30*
Ro-ro passenger ship***	4,000 GT and above	n/a	5**	20	30
	1,000 - 4,000 GT	n/a	0-5* **	0-20*	0-30*
Cruise passenger ship*** having non-conventional propulsion	85,000 GT and above	n/a	5 **	20	30
	25,000 – 85,000 GT	n/a	0-5* **	0-20*	0-30*

* Reduction factor to be linearly interpolated between the two values dependent upon vessel size. The lower value of the reduction factor is to be applied to the smaller ship size.

** Phase 1 commences for those ships when the amendments to MARPOL Annex VI come into effect.

*** Reduction rate applies those ships constructed on or after [date of entry into force].

Note: n/a means that no required EEDI applies."

7 New rows are added to Table 2 in regulation 21.3 for ro-ro cargo ship (vehicle carrier), LNG carrier, cruise passenger ship having non-conventional propulsion, ro-ro cargo ships and ro-ro passenger ships as follows:

Ship type defined in regulation 2	a	b	c
2.33 Ro-ro cargo ship (vehicle carrier)	$(DWT/GT)^{-0.7} \cdot 780.36$ where $DWT/GT < 0.3$ 1812.63 where $DWT/GT \geq 0.3$	DWT of the ship	0.471
2.34 Ro-ro cargo ship	1405.15	DWT of the ship	0.498
2.35 Ro-ro passenger ship	752.16	DWT of the ship	0.381
2.38 LNG carrier	2253.7	DWT of the ship	0.474
2.39 Cruise passenger ship having non-conventional propulsion	170.84	GT of the ship	0.214

ANNEX 14

RESOLUTION MEPC. 231(65)

Adopted on 17 May 2013

**2013 GUIDELINES FOR CALCULATION OF REFERENCE LINES FOR USE
WITH THE ENERGY EFFICIENCY DESIGN INDEX (EEDI)**

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee (the Committee) conferred upon it by international conventions for the prevention and control of marine pollution,

RECALLING ALSO that, at its sixty-second session, the Committee adopted, by resolution MEPC.203(62), amendments to the Annex of the Protocol of 1997 to amend the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (inclusion of regulations on energy efficiency for ships in MARPOL Annex VI),

NOTING that regulation 21 (required EEDI) of MARPOL Annex VI, as amended, requires reference lines to be established for each ship type to which regulation 21 is applicable,

NOTING ALSO that Guidelines for calculation of reference lines for use with the Energy Efficiency Design Index (EEDI) were adopted at its sixty-third session,

HAVING CONSIDERED, at its sixty-fifth session, the draft amendments to Guidelines for calculation of reference lines for use with the Energy Efficiency Design Index (EEDI) for extension of the application of the EEDI to LNG carrier, ro-ro cargo ship (vehicle carrier), ro-ro cargo ship and ro-ro passenger ship,

1. ADOPTS the *2013 Guidelines for calculation of reference lines for use with the Energy Efficiency Design Index (EEDI)*, as set out at annex to the present resolution;
2. AGREES to keep these Guidelines under review in light of the experience gained; and
3. REVOKES the Guidelines for calculation of reference lines for use with the Energy Efficiency Design Index (EEDI), adopted by resolution MEPC.215(63), as from this date.

2013 GUIDELINES FOR CALCULATION OF REFERENCE LINES FOR USE WITH THE ENERGY EFFICIENCY DESIGN INDEX (EEDI)

1 The reference lines are established for each ship type to which regulation 21 (Required EEDI) of MARPOL Annex VI is applicable. The purpose of the EEDI is to provide a fair basis for comparison, to stimulate the development of more efficient ships in general and to establish the minimum efficiency of new ships depending on ship type and size. Hence, the reference lines for each ship type is calculated in a transparent and robust manner.

2 Ship types are defined in regulation 2 of MARPOL Annex VI. The reference line for each ship type is used for the determination of the required EEDI as defined in regulation 21 of MARPOL Annex VI.

3 These guidelines apply to the following ships types: bulk carrier, gas carrier, tanker, containership, general cargo ship, refrigerated cargo carrier, combination carrier, ro-ro cargo ship, ro-ro cargo ship (vehicle), ro-ro passenger ship and LNG carrier. It is noted that a method of calculating reference lines has not been established for passenger ships other than cruise passenger ship having non-conventional propulsion.

Definition of a reference line

4 A reference line is defined as a curve representing an average index value fitted on a set of individual index values for a defined group of ships.

5 One reference line is developed for each ship type to which regulation 21 of MARPOL Annex VI is applicable, ensuring that only data from comparable ships are included in the calculation of each reference line.

6 The reference line value is formulated as *Reference line value* = $a (100\% \text{ deadweight})^{-c}$ where "a" and "c" are parameters determined from the regression curve fit.

7 Input data for the calculation of the reference lines is filtered through a process where data deviating more than two standard deviations from the regression line are discarded. The regression is then applied again to generate a corrected reference line. For the purpose of documentation, discarded data is listed with the ships IMO number.

Data sources

8 IHS Fairplay (IHSF) database is selected as the standard database delivering the primary input data for the reference line calculation. For the purpose of the EEDI reference line calculations, a defined version of the database is archived as agreed between the Secretariat and IHSF.

9 For the purpose of calculating the reference lines, data relating to existing ships of 400 GT and above from the IHSF database delivered in the period from 1 January 1999 to 1 January 2009 are used. For ro-ro cargo and ro-ro passenger ships, data relating to existing ships of 400 GT and above from the IHSF database delivered in the period from 1 January 1998 to 1 January 2010 are used.

10 The following data from the IHSF database on ships with conventional propulsion systems is used when calculating the reference lines:

- .1 data on the ships' capacity is used as *Capacity* for each ship type as defined in MEPC.212(63);
- .2 data on the ships' service speed is used as reference speed V_{ref} ; and
- .3 data on the ships' total installed main power is used as $MCR_{ME(i)}$.

11 For some ships, some data entries may be blank or contain a zero (0) in the database. Datasets with blank power, capacity and/or speed data should be removed from the reference line calculations. For the purpose of later references, the omitted ships should be listed with their IMO number.

12 To ensure a uniform interpretation, the association of ship types defined in regulation 2 of MARPOL Annex VI, with the ship types given by the IHSF database and defined by the so-called Stat codes, is shown in the appendix to this guideline. Table 1 in the appendix 1 lists the ship types from IHSF used for the calculation of reference lines. Table 2 lists the IHSF ship types not used when calculating the reference lines.

Calculation of reference lines

13 To calculate the reference line, an estimated index value for each ship contained in the set of ships per ship type is calculated using the following assumptions:

- .1 the carbon emission factor is constant for all engines, i.e. $C_{F,ME} = C_{F,AE} = CF = 3.1144 \text{ g CO}_2/\text{g fuel}$;
- .2 the specific fuel consumption for all ship types is constant for all main engines, i.e. $SFC_{ME} = 190 \text{ g/kWh}$;
- .3 $P_{ME(i)}$ is 75% of the total installed main power ($MCR_{ME(i)}$);
- .4 the specific fuel consumption for all ship types is constant for all auxiliary engines, i.e. $SFC_{AE} = 215 \text{ g/kWh}$;
- .5 P_{AE} is the auxiliary power and is calculated according to paragraphs 2.5.6.1 and 2.5.6.2 of the annex to MEPC.212(63);
- .6 for ro-ro passenger ships, P_{AE} is calculated as follows:
$$P_{AE} = 0.866 \cdot GT^{0.732}$$
- .7 no correction factors are used except for f_{JRORo} and f_{cRoPax} ; and
- .8 innovative mechanical energy efficiency technology, shaft motors and other innovative energy efficient technologies are all excluded from the reference line calculation, i.e. $P_{AEff} = 0$, $P_{PTI} = 0$, $P_{eff} = 0$.

14 The equation for calculating the estimated index value for each ship (excluding containerships and ro-ro cargo ships (vehicle carrier) – see paragraph 15) is as follows:

$$\text{Estimated Index Value} = 3.1144 \cdot \frac{190 \cdot \sum_{i=1}^{NME} P_{MEi} + 215 \cdot P_{AE}}{\text{Capacity} \cdot V_{ref}}$$

15 For containerships, 70 per cent of the deadweight (70% DWT) is used as *capacity* for calculating the estimated index value for each containership as follows:

$$\text{Estimated Index Value} = 3.1144 \cdot \frac{190 \cdot \sum_{i=1}^{NME} P_{MEi} + 215 \cdot P_{AE}}{70\% \text{DWT} \cdot V_{ref}}$$

16 For ro-ro cargo ship (vehicle carrier), the following equation is used:

$$\text{Estimated Index Value} = f_{ro-roV} \cdot 3.1144 \cdot \frac{190 \cdot \sum_{i=1}^{nME} P_{MEi} + 215 \cdot P_{AE}}{\text{Capacity} \cdot V_{ref}}$$

Where:

$$f_{ro-roV} = \frac{-15571 \cdot F_n^2 + 5538.4 \cdot F_n - 132.67}{287}$$

17 For ro-ro cargo ships the estimated index value for each individual ship is calculated as follows:

$$\text{Estimated Index Value} = \frac{3.1144 \cdot (f_{jRoRo} \cdot 190 \cdot \sum_{i=1}^{nME} P_{MEi} + 215 \cdot P_{AE})}{\text{Capacity} \cdot V_{ref}}$$

18 For ro-ro passenger ships the estimated index value for each individual ship is calculated as follows:

$$\text{Estimated Index Value} = \frac{3.1144 \cdot (f_{jRoRo} \cdot 190 \cdot \sum_{i=1}^{nME} P_{MEi} + 215 \cdot P_{AE})}{f_{cRoPax} \cdot \text{Capacity} \cdot V_{ref}}$$

19 For LNG carriers, the equation set out in appendix 2 is used.

Calculation of reference line parameters "a" and "c"

20 For all ship types to which these guidelines apply except for ro-ro passenger ships, parameters "a" and "c" are determined from a regression analysis undertaken by plotting the calculated estimated index values against 100 per cent deadweight (100% DWT).

21 For ro-ro passenger ships, parameters "a" and "c" are determined from a regression analysis undertaken by plotting the calculated estimated index values against corrected deadweight, DWT, for ships to which the capacity correction factor, f_{cRoPax} , applies and against 100 per cent deadweight (100% DWT) for ships to which the capacity correction factor does not apply.

Documentation

22 For purposes of transparency, the ships used in the calculation of the reference lines should be listed with their IMO numbers and the numerator and denominator of the index formula, as given in paragraphs 14 to 19. The documentation of the aggregated figures preserves the individual data from direct access but offers sufficient information for possible later scrutiny.

* * *

Appendix 1

1 To ensure a uniform interpretation, ship types defined in regulation 2 of MARPOL Annex VI are compared to the ship types given in the IHSF database.

2 The IHSF Stat code system provides several levels of definition as follows:

.1 Highest level:

A	Cargo carrying
B	Work vessel
W	Non-seagoing merchant ships
X	Non-merchant
Y	Non-propelled
Z	Non-ship structures

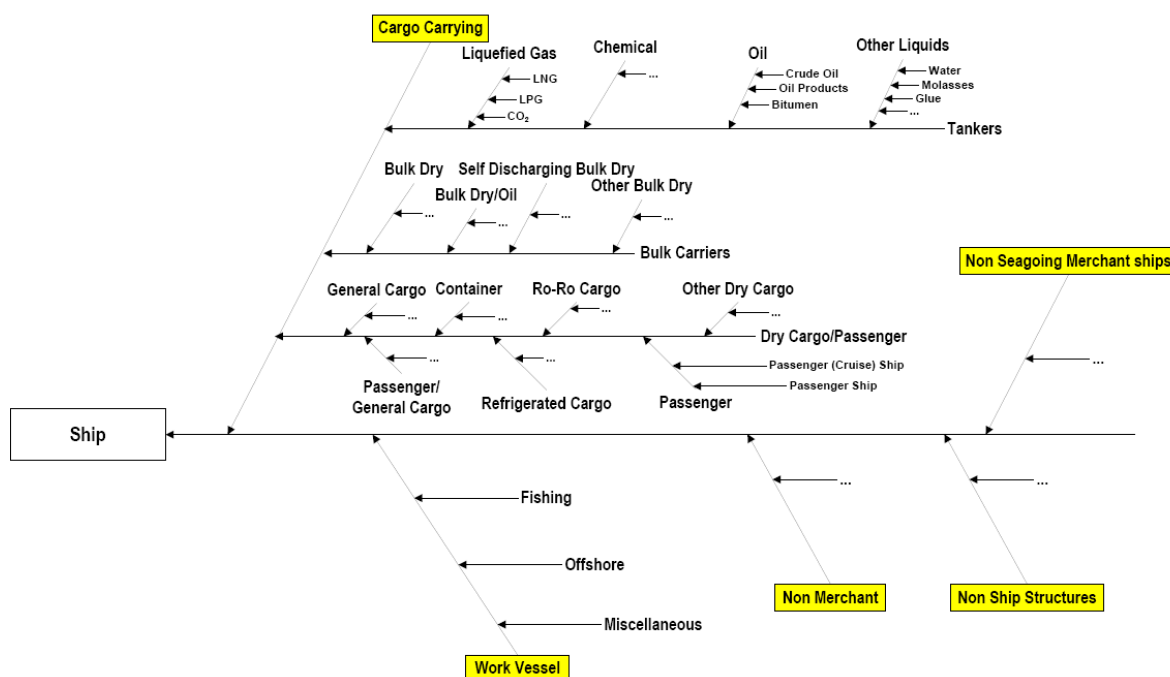
For the purpose of the EEDI, only group "A cargo carrying" needs to be considered. A graphical representation of this is given below.

.2 The next level comprises:

A1	Tankers
A2	Bulk carriers
A3	Dry cargo/passenger

There are further differentiations until level five, e.g. "A31A2GX General Cargo Ship", and each category is described.

The complete list is attached.



3 The ship types from the IHSF Stat code 5 (Statcode5v1075) used for the calculation of reference lines for the following ship types: bulk carrier, gas carrier, tanker, containership, general cargo ship, refrigerated cargo carrier and combination carrier, are set out in table 1. The IHSF database ship types, not used in the calculation of reference lines for the specific ship types, are set out in table 2, e.g. ships built for sailing on the Great Lakes and landing craft.

Table 1: Ship types from IHSF used for the calculation of reference lines for use with the EEDI

.1 Bulk carrier	Bulk dry	A21A2BC	Bulk carrier	A single deck cargo vessel with an arrangement of topside ballast tanks for the carriage of bulk dry cargo of a homogeneous nature.
	Bulk dry	A21B2BO	Ore carrier	A single deck cargo ship fitted with two longitudinal bulkheads. Ore is carried in the centreline holds only.
	Self-discharging bulk dry	A23A2BD	Bulk cargo carrier, self-discharging	A bulk carrier fitted with self-trimming holds, a conveyor belt (or similar system) and a boom which can discharge cargo alongside or to shore without the assistance of any external equipment.
	Other dry bulk	A24A2BT	Cement carrier	A single deck cargo vessel fitted with pumping arrangements for the carriage of cement in bulk. There are no weather deck hatches. May be self-discharging.
		A24B2BW	Wood chips carrier, self-unloading	A single deck cargo vessel with high freeboard for the carriage of wood chips. May be self-discharging.
		A24C2BU	Urea carrier	A single deck cargo vessel for the carriage of urea in bulk. May be self-discharging.
		A24D2BA	Aggregates carrier	A single deck cargo vessel for the carriage of aggregates in bulk. Also known as a sand carrier. May be self-discharging.
		A24E2BL	Limestone carrier	A single deck cargo vessel for the carriage of limestone in bulk. There are no weather deck hatches. May be self-discharging.
.2 Gas carrier	Liquefied gas	A11A2TN	LNG tanker	A tanker for the bulk carriage of liquefied natural gas (primarily methane) in independent insulated tanks. Liquefaction is achieved at temperatures down to -163 deg C.
		A11B2TG	LPG tanker	A tanker for the bulk carriage of liquefied petroleum gas in insulated tanks, which may be independent or integral. The cargo is pressurized (smaller vessels), refrigerated (larger vessels) or both ("semi-pressurized") to achieve liquefaction.
		A11C2LC	CO ₂ tanker	A tanker for the bulk carriage of liquefied carbon dioxide.
		A11A2TQ	CNG tanker	A tanker for the bulk carriage of compressed natural gas. Cargo remains in gaseous state but is highly compressed.

.3 Tanker	Chemical	A12A2LP	Molten sulphur tanker	A tanker for the bulk carriage of molten sulphur in insulated tanks at a high temperature.
		A12A2TC	Chemical tanker	A tanker for the bulk carriage of chemical cargoes, lube oils, vegetable/animal oils and other chemicals as defined in the International Bulk Chemical Code. Tanks are coated with suitable materials which are inert to the cargo.
		A12B2TR	Chemical/ products tanker	A chemical tanker additionally capable of the carriage of clean petroleum products.
		A12C2LW	Wine tanker	A cargo ship designed for the bulk transport of wine in tanks. Tanks will be stainless steel or lined. New vessels will be classified as chemical carriers.
		A12D2LV	Vegetable oil tanker	A cargo ship designed for the bulk transport of vegetable oils in tanks. Tanks will be stainless steel or lined. New vessels will be classified as chemical carriers.
		A12E2LE	Edible oil tanker	A cargo ship designed for the bulk transport of edible oils in tanks. Tanks will be stainless steel or lined. New vessels will be classified as chemical carriers.
		A12F2LB	Beer tanker	A tanker for the bulk carriage of beer.
		A12G2LT	Latex tanker	A tanker for the bulk carriage of latex.
		A12H2LJ	Fruit juice tanker	A tanker for the bulk carriage of fruit juice concentrate in insulated tanks.
	Oil	A13A2TV	Crude oil tanker	A tanker for the bulk carriage of crude oil.
		A13A2TW	Crude/oil products tanker	A tanker for the bulk carriage of crude oil but also for carriage of refined oil products.
		A13B2TP	Products tanker	A tanker for the bulk carriage of refined petroleum products, either clean or dirty.
		A13B2TU	Tanker (unspecified)	A tanker whose cargo is unspecified.
		A13C2LA	Asphalt/ Bitumen tanker	A tanker for the bulk carriage of asphalt/bitumen at temperatures between 150 and 200 deg C.
		A13E2LD	Coal/oil mixture tanker	A tanker for the bulk carriage of a cargo of coal and oil mixed as a liquid and maintained at high temperatures.
	Other liquids	A14A2LO	Water tanker	A tanker for the bulk carriage of water.
		A14F2LM	Molasses tanker	A tanker for the bulk carriage of molasses.
		A14G2LG	Glue tanker	A tanker for the bulk carriage of glue.
		A14H2LH	Alcohol tanker	A tanker for the bulk carriage of alcohol.
		A14N2LL	Caprolactam tanker	A tanker for the bulk carriage of caprolactam, a chemical used in the plastics industry for the production of polyamides.
	Chemical	A12A2TL	Parcels tanker	A chemical tanker with many segregated cargo tanks to carry multiple grades of chemicals as defined in the International Bulk Chemical Code. Typically these can have between 10 and 60 different tanks.

.4 Containership	Container	A33A2CC	Containership (fully cellular)	A single deck cargo vessel with boxed holds fitted with fixed cellular guides for the carriage of containers.
.5 General cargo ship	General cargo	A31A2GX	General cargo ship	A single or multi-deck cargo vessel for the carriage of various types of dry cargo. Single deck vessels will typically have box-shaped holds. Cargo is loaded and unloaded through weather deck hatches.
	Other dry cargo	A38H2GU	Pulp carrier	A vessel designed for carrying paper pulp.
.6 Refrigerated cargo carrier	Refrigerated cargo	A34A2GR	Refrigerated cargo ship	A multi-deck cargo ship for the carriage of refrigerated cargo at various temperatures.
.7 Combination carrier	Bulk dry/oil	A22A2BB	Bulk/oil carrier (OBO)	A bulk carrier arranged for the alternative (but not simultaneous) carriage of crude oil.
	Bulk dry/oil	A22B2BR	Ore/oil carrier	An ore carrier arranged for the alternative (but not simultaneous) carriage of crude oil.
	Bulk dry/oil	A22A2BP	Ore/bulk/products carrier	A bulk carrier arranged for the alternative (but not simultaneous) carriage of oil products.

Table 2: Ship types from IHSF not included in the calculation of reference lines for use with the EEDI

.1 Bulk carrier	Bulk dry	A21A2BG	Bulk carrier, laker only	A single deck cargo vessel with dimensions suited to the limitations of Great Lakes of North America trade, unsuitable for open sea navigation. Hatches are more numerous than standard bulk carriers, and much wider than they are long.
	Bulk dry	A21A2BV	Bulk carrier (with vehicle decks)	A bulk carrier with movable decks for the additional carriage of new vehicles.
	Bulk dry/oil	A22A2BB	Bulk/oil carrier (OBO)	A bulk carrier arranged for the alternative (but not simultaneous) carriage of crude oil.
	Bulk dry/oil	A22B2BR	Ore/oil carrier	An ore carrier arranged for the alternative (but not simultaneous) carriage of crude oil.
	Bulk dry/oil	A22A2BP	Ore/bulk/products carrier	A bulk carrier arranged for the alternative (but not simultaneous) carriage of oil products.
	Self-discharging bulk dry	A23A2BK	Bulk cargo carrier, self-discharging, laker	A Great Lakes bulk carrier fitted with a conveyor belt (or similar system) and a boom which can discharge cargo alongside or to shore without the assistance of any external equipment.
	Other bulk dry	A24H2BZ	Powder carrier	A single deck cargo vessel for the carriage of fine powders such as fly ash. There are no weather deck hatches.
	Other bulk dry	A24G2BS	Refined sugar carrier	A single deck cargo vessel for the carriage of refined sugar. Sugar is loaded in bulk and bagged in transit (BIBO – Bulk In – Bag Out).
.2 Gas carrier	Liquefied gas	A11B2TH	LPG/chemical tanker	An LPG tanker additionally capable of the carriage of chemical products as defined in the International Bulk Chemical Code.
.3 Tanker	Oil	A13A2TS	Shuttle tanker	A tanker for the bulk carriage of crude oil specifically for operation between offshore terminals and refineries. Is typically fitted with bow loading facilities.
.4 Containership	Container	A33B2CP	Passenger/containership	A containership with accommodation for the carriage of more than 12 passengers.

.5 General cargo ship	General cargo	A31A2GO	Open hatch cargo ship	A large single deck cargo vessel with full width hatches and boxed holds for the carriage of unitized dry cargo such as forest products and containers. Many are fitted with a gantry crane.
	General cargo	A31A2GS	General cargo/tanker (container/oil/bulk – COB ship)	A general cargo ship with reversible hatch covers; one side is flush and the other is fitted with baffles for use with liquid cargoes. Containers can be carried on the hatch covers in dry cargo mode.
	General cargo	A31A2GT	General cargo/tanker	A general cargo ship fitted with tanks for the additional carriage of liquid cargo.
	General cargo	A31C2GD	Deck cargo ship	A vessel arranged for carrying unitized cargo on deck only. Access may be by use of a ro-ro ramp.
	Passenger/general cargo	A32A2GF	General cargo/passenger ship	A general cargo ship with accommodation for the carriage of more than 12 passengers.
	Other dry cargo	A38A2GL	Livestock carrier	A cargo vessel arranged for the carriage of livestock.
	Other dry cargo	A38B2GB	Barge carrier	A cargo vessel arranged for the carriage of purpose built barges (lighters) loaded with cargo. Typically loading is by way of a gantry crane. Also known as Lighter Aboard SHip vessels (LASH).
	Other dry cargo	A38C3GH	Heavy load carrier, semi-submersible	A heavy load carrier which is semi-submersible for the float on loading/unloading of the cargoes.
	Other dry cargo	A38C3GY	Yacht carrier, semi-submersible	A semi-submersible heavy load carrier specifically arranged for the carriage of yachts.
	Other dry cargo	A38D2GN	Nuclear fuel carrier	A cargo vessel arranged to carry nuclear fuel in flasks.
	Other dry cargo	A38D2GZ	Nuclear fuel carrier (with ro-ro facility)	A nuclear fuel carrier which is loaded and unloaded by way of a ro-ro ramp.
	Other dry cargo	A38B3GB	Barge carrier, semi-submersible	A barge carrier which is semi-submersible for the float on loading/unloading of the barges.
	Other dry cargo	A38C2GH	Heavy load carrier	A cargo vessel able to carry heavy and/or outsized individual cargoes. Cargo may be carried on deck or in holds and may be loaded by crane and/or ro-ro ramps.

* * *

Appendix 2

EQUATION FOR CALCULATING THE INDEX VALUE OF REFERENCE LINE FOR LNG CARRIERS

	Direct Drive Diesel	Dual Fuel Diesel – Electronic (DFDE)	Steam Turbine
Margins	<i>Engine</i> : 10% <i>Sea</i> : 20%	<i>Engine</i> : – <i>Sea</i> : 20%	<i>Engine</i> : – <i>Sea</i> : 20%
Design Margin	$M \arg in = \frac{0.9}{1.2}$ $M \arg in = 75\%$	$M \arg in = \frac{1}{1.2}$ $M \arg in = 83\%$	$M \arg in = \frac{1}{1.2}$ $M \arg in = 83\%$
P_{ME} Formula¹	$P_{ME(i)} = 0.75 \cdot (MCR_{ME(i)} - P_{PTO(i)})$	$P_{ME(i)} = 0.83 \cdot \frac{MPP_{(i)}}{\eta_{Electrical(i)}}$	$P_{ME(i)} = 0.83 \cdot (MCR_{ME(i)} - P_{PTO(i)})$
SFC_{ME} in g/kWh (Fuel)	190 (HFO)	175 (FBO)	285 (FBO)
P_{AE} Formula²	$P_{AE} = 0.025 \cdot \sum_{i=1}^{nME} MCR_{ME(i)} + 250 + Capacity \cdot BOR \cdot 15$	$P_{AE} = (0.025 + 0.02) \cdot \sum_{i=1}^{nME} P_{ME(i)} + 250$	$P_{AE} = 0$
Index Formulae	$3.1144 \cdot \frac{190 \cdot \sum_{i=1}^{nME} P_{ME(i)} + 215 \cdot P_{AE}}{Capacity \cdot V_{ref}}$	$2.75 \cdot \frac{175 \cdot \sum_{i=1}^{nME} P_{ME(i)} + 175 \cdot P_{AE}}{Capacity \cdot V_{ref}}$	$2.75 \cdot \frac{285 \cdot \sum_{i=1}^{nME} P_{ME(i)}}{Capacity \cdot V_{ref}}$

NOTES:

¹ MPP_(i) of DFDE is calculated as 66% of MCR of engines.

² BOR of Direct Drive Diesel is 0.15 (%/day).

ANNEX 15

AMENDMENTS TO THE UNIFIED INTERPRETATION TO MARPOL ANNEX VI (MEPC.1/CIRC.795)

Regulation 5 *Surveys*

Regulation 5.4.4 reads as follows:

- "4 For existing ships, the verification of the requirement to have a SEEMP on board according to regulation 22 shall take place at the first intermediate or renewal survey identified in paragraph 1 of this regulation, whichever is the first, on or after 1 January 2013."

Regulation 6 *Issue or endorsement of a Certificates*

Regulation 6.4 reads as follows:

- "4 An International Energy Efficiency Certificate for the ship shall be issued after a survey in accordance with the provisions of regulation 5.4 of this Annex to any ship of 400 gross tonnage and above before that ship may engage in voyages to ports or offshore terminals under the jurisdiction of other Parties."

Regulation 22 *Ship Energy Efficiency Management Plan (SEEMP)*

Regulation 22.1 reads as follows:

- "1 Each ship shall keep on board a ship-specific Ship Energy Efficiency Management Plan (SEEMP). This may form part of the ship's Safety Management System (SMS)."

Interpretation:

- 1 The International Energy Efficiency Certificate (IEEC) shall be issued for both new and existing ships to which chapter 4 of MARPOL Annex VI applies. Ships which are not required to keep a SEEMP on board are not required to be issued with an IECC.
- ...
- 6 With respect to ships required to keep on board a SEEMP, such ships exclude platforms (including FPSOs and FSUs) and drilling rigs, regardless of their propulsion, and any other ship without means of propulsion.

ANNEX 16

RESOLUTION MEPC.232(65)

Adopted on 17 May 2013

**2013 INTERIM GUIDELINES FOR DETERMINING MINIMUM PROPULSION
POWER TO MAINTAIN THE MANOEUVRABILITY OF SHIPS
IN ADVERSE CONDITIONS**

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee (the Committee) conferred upon it by international conventions for the prevention and control of marine pollution,

RECALLING ALSO that, at its sixty-second session, the Committee adopted, by resolution MEPC.203(62), amendments to the annex of the Protocol of 1997 to amend the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (inclusion of regulations on energy efficiency for ships in MARPOL Annex VI),

NOTING that the amendments to MARPOL Annex VI adopted at its sixty-second session by inclusion of a new chapter 4 for regulations on energy efficiency for ships, entered into force on 1 January 2013,

NOTING ALSO that regulation 21.5 of MARPOL Annex VI, as amended, requires that the installed propulsion power shall not be less than the propulsion power needed to maintain the manoeuvrability of the ship under adverse conditions as defined in the guidelines,

RECOGNIZING that the amendments to MARPOL Annex VI requires the adoption of relevant guidelines for smooth and uniform implementation of the regulations and to provide sufficient lead time for industry to prepare,

HAVING CONSIDERED, at its sixty-fifth session, the draft *2013 Interim Guidelines for determining minimum propulsion power to maintain the manoeuvrability of ships in adverse conditions*,

1. ADOPTS the *2013 Interim Guidelines for determining minimum propulsion power to maintain the manoeuvrability of ships in adverse conditions*, as set out at annex to the present resolution;
2. INVITES Administrations to take the annexed Guidelines into account when developing and enacting national laws which give force to and implement provisions set forth in regulation 20 of MARPOL Annex VI, as amended;
3. REQUESTS the Parties to MARPOL Annex VI and other Member Governments to bring the annexed Guidelines related to the Energy Efficiency Design Index (EEDI) to the attention of shipowners, ship operators, shipbuilders, ship designers and any other interested groups;
4. AGREES to keep these Guidelines under review in light of the experience gained; and
5. REVOKES the Interim Guidelines circulated by MSC-MEPC.2/Circ.11, as from this date.

ANNEX

2013 INTERIM GUIDELINES FOR DETERMINING MINIMUM PROPULSION POWER TO MAINTAIN THE MANOEUVRABILITY OF SHIP IN ADVERSE CONDITIONS

0 Purpose

The purpose of these interim guidelines is to assist Administrations and recognized organizations in verifying that ships, complying with EEDI requirements set out in regulations on Energy Efficiency for Ships, have sufficient installed propulsion power to maintain the manoeuvrability in adverse conditions, as specified in regulation 21.5 in chapter 4 of MARPOL Annex VI.

1 Definition

1.1 "Adverse conditions" mean sea conditions with the following parameters:

Significant wave height h_s , m	Peak wave period T_P , s	Mean wind speed V_w , m/s
5.5	7.0 to 15.0	19.0

JONSWAP sea spectrum with the peak parameter of 3.3 is to be considered for coastal waters.

1.2 The following adverse condition should be applied to ships defined as the following threshold value of ship size.

Ship length, m	Significant wave height h_s , m	Peak wave period T_P , s	Mean wind speed V_w , m/s
Less than 200	4.0	7.0 to 15.0	15.7
$200 \leq L_{pp} \leq 250$	Parameters linearly interpolated depending on ship's length		
More than $L_{pp} = 250$	Refer to paragraph 1.1		

2 Applicability*

2.1 These guidelines should be applied in the case of all new ships of types as listed in table 1 of appendix required to comply with regulations on Energy Efficiency for Ships according to regulation 21 of MARPOL Annex VI.

2.2 Notwithstanding the above, these guidelines should not be applied to the ships with un-conventional propulsion system such as pod propulsion.

2.3 These guidelines are intended for ships in unrestricted navigation; for other cases, the Administration should determine appropriate guidelines, taking the operational area and relevant restrictions into account.

* These Interim Guidelines are applied to ships required to comply with regulations on Energy Efficiency for Ships according to regulation 21 of MARPOL Annex VI during Phase 0 (i.e. for those ship types as in table 1 of appendix with the size of equal or more than 20,000 DWT).

3 Assessment procedure

3.1 The assessment can be carried out at two different levels as listed below:

- .1 Minimum power lines assessment; and
- .2 Simplified assessment.

3.2 The ship should be considered to have sufficient power to maintain the manoeuvrability in adverse conditions if it fulfils one of these assessment levels.

4 Assessment level 1 – minimum power lines assessment

4.1 If the ship under consideration has installed power not less than the power defined by the minimum power line for the specific ship type, the ship should be considered to have sufficient power to maintain the manoeuvrability in adverse conditions.

4.2 The minimum power lines for the different types of ships are provided in the appendix.

5 Assessment level 2 – simplified assessment

5.1 The methodology for the simplified assessment is provided in the appendix.

5.2 If the ship under consideration fulfils the requirements as defined in the simplified assessment, the ship should be considered to have sufficient power to maintain the manoeuvrability in adverse conditions.

6 Documentation

6.1 Test documentation should include at least, but not be limited to, a:

- .1 description of the ship's main particulars;
- .2 description of the ship's relevant manoeuvring and propulsion systems;
- .3 description of the assessment level used and results; and
- .4 description of the test method(s) used with references, if applicable.

* * *

Appendix

ASSESSMENT PROCEDURES TO MAINTAIN THE MANOEUVRABILITY UNDER ADVERSE CONDITIONS, APPLICABLE DURING PHASE 0 OF THE EEDI IMPLEMENTATION

1 Scope

1.1 The procedures as described below are applicable during Phase 0 of the EEDI implementation as defined in regulation 21 of MARPOL Annex VI (see also paragraph 0 – Purpose of these interim guidelines).

2 Minimum power lines

2.1 The minimum power line values of total installed MCR, in kW, for different types of ships should be calculated as follows:

$$\text{Minimum Power Line Value} = a \times (DWT) + b$$

Where:

DWT is the deadweight of the ship in metric tons; and
a and *b* are the parameters given in table 1 for tankers, bulk carriers and combination carriers.

Table 1: Parameters *a* and *b* for determination of the minimum power line values for the different ship types

Ship Type	<i>a</i>	<i>b</i>
Bulk Carriers	0.0687	2924.4
Tankers	0.0689	3253.0
Combination Carriers	see tankers above	

The total installed MCR of all main propulsion engines should not be less than the minimum power line value, where MCR is the value specified on the EIAPP Certificate.

3 Simplified assessment

3.1 The simplified assessment procedure is based on the principle that, if the ship has sufficient installed power to move with a certain advance speed in head waves and wind, the ship will also be able to keep course in waves and wind from any other direction. The minimum ship speed of advance in head waves and wind is thus selected depending on ship design, in such a way that the fulfilment of the ship speed of advance requirements means fulfilment of course-keeping requirements. For example, ships with larger rudder areas will be able to keep course even if the engine is less powerful; similarly, ships with a larger lateral windage area will require more power to keep course than ships with a smaller windage area.

3.2 The simplification in this procedure is that only the equation of steady motion in longitudinal direction is considered; the requirements of course-keeping in wind and waves are taken into account indirectly, by adjusting the required ship speed of advance in head wind and waves.

3.3 The assessment procedure consists of two steps:

- .1 definition of the required advance speed in head wind and waves, ensuring course-keeping in all wave and wind directions; and
- .2 assessment whether the installed power is sufficient to achieve the required advance speed in head wind and waves.

Definition of required ship speed of advance

3.4 The required ship advance speed through the water in head wind and waves, V_s , is set to the larger of:

- .1 minimum navigational speed, V_{nav} ; or
- .2 minimum course-keeping speed, V_{ck} .

3.5 The minimum navigational speed, V_{nav} , facilitates leaving coastal area within a sufficient time before the storm escalates, to reduce navigational risk and risk of excessive motions in waves due to unfavourable heading with respect to wind and waves. The minimum navigational speed is set to 4.0 knots.

3.6 The minimum course-keeping speed in the simplified assessment, V_{ck} , is selected to facilitate course-keeping of the ships in waves and wind from all directions. This speed is defined on the basis of the reference course-keeping speed $V_{ck, ref}$, related to ships with the rudder area A_R equal to 0.9 per cent of the submerged lateral area corrected for breadth effect, and an adjustment factor taking into account the actual rudder area:

$$V_{ck} = V_{ck, ref} - 10.0 \times (A_{R\%} - 0.9) \quad (1)$$

where V_{ck} in knots, is the minimum course-keeping speed, $V_{ck, ref}$ in knots, is the reference course-keeping speed, and $A_{R\%}$ is the actual rudder area, A_R , as percentage of the submerged lateral area of the ship corrected for breadth effect, $A_{LS, cor}$, calculated as $A_{R\%} = A_R / A_{LS, cor} \cdot 100\%$. The submerged lateral area corrected for breadth effect is calculated as $A_{LS, cor} = L_{pp} T_m (1.0 + 25.0 (B_{wl} / L_{pp})^2)$, where L_{pp} is the length between perpendiculars in m, B_{wl} is the water line breadth in m and T_m is the draft at midship in m. In case of high-lift rudders or other alternative steering devices, the equivalent rudder area to the conventional rudder area is to be used.

3.7 The reference course-keeping speed $V_{ck, ref}$ for bulk carriers, tankers and combination carriers is defined, depending on the ratio A_{FW} / A_{LW} of the frontal windage area, A_{FW} , to the lateral windage area, A_{LW} , as follows:

- .1 9.0 knots for $A_{FW} / A_{LW} = 0.1$ and below and 4.0 knots for $A_{FW} / A_{LW} = 0.40$ and above; and
- .2 linearly interpolated between 0.1 and 0.4 for intermediate values of A_{FW} / A_{LW} .

Procedure of assessment of installed power

3.8 The assessment is to be performed in maximum draught conditions at the required ship speed of advance, V_s , defined above. The principle of the assessment is that the required propeller thrust, T in N, defined from the sum of bare hull resistance in calm water

R_{cw} , resistance due to appendages R_{app} , aerodynamic resistance R_{air} , and added resistance in waves R_{aw} , can be provided by the ship's propulsion system, taking into account the thrust deduction factor t :

$$T = (R_{cw} + R_{air} + R_{aw} + R_{app}) / (1 - t) \quad (2)$$

3.9 The calm-water resistance for bulk carriers, tankers and combination carriers can be calculated neglecting the wave-making resistance as $R_{cw} = (1 + k)C_F \frac{1}{2} \rho S V_s^2$, where k is the form factor, $C_F = \frac{0.075}{(\log_{10} Re - 2)^2}$ is the frictional resistance coefficient, $Re = V_s L_{pp} / \nu$ is the Reynolds number, ρ is water density in kg/m^3 , S is the wetted area of the bare hull in m^2 , V_s is the ship advance speed in m/s , and ν is the kinematic viscosity of water in m^2/s .

3.10 The form factor k should be obtained from model tests. Where model tests are not available the empirical formula below may be used:

$$k = -0.095 + 25.6 \frac{C_B}{(L_{pp}/B_{wl})^2 \sqrt{B_{wl}/T_m}} \quad (3)$$

where C_B is the block coefficient based on L_{pp} .

3.11 Aerodynamic resistance can be calculated as $R_{air} = C_{air} \frac{1}{2} \rho_a A_F V_{w,rel}^2$, where C_{air} is the aerodynamic resistance coefficient, ρ_a is the density of air in kg/m^3 , A_F is the frontal windage area of the hull and superstructure in m^2 , and $V_{w,rel}$ is the relative wind speed in m/s , defined by the adverse conditions in paragraph 1.1 of the interim guidelines, V_w , added to the ship advance speed, V_s . The coefficient C_{air} can be obtained from model tests or empirical data. If none of the above is available, the value 1.0 is to be assumed.

3.12 The added resistance in waves, R_{aw} , defined by the adverse conditions and wave spectrum in paragraph 1 of the interim guidelines, is calculated as:

$$R_{aw} = 2 \int_0^\infty \frac{R_{aw}(V_s, \omega)}{\zeta_a^2} S_{\zeta\zeta}(\omega) d\omega \quad (4)$$

where $R_{aw}(V_s, \omega) / \zeta_a^2$ is the quadratic transfer function of the added resistance, depending on the advance speed V_s in m/s , wave frequency ω in rad/s , the wave amplitude, ζ_a in m and the wave spectrum, $S_{\zeta\zeta}$ in m^2s . The quadratic transfer function of the added resistance can be obtained from the added resistance test in regular waves at the required ship advance speed V_s as per ITTC procedures 7.5-02 07-02.1 and 7.5-02 07-02.2, or from equivalent method verified by the Administration.

3.13 The thrust deduction factor t can be obtained either from model tests or empirical formula. Default conservative estimate is $t=0.7w$, where w is the wake fraction. Wake fraction w can be obtained from model tests or empirical formula; default conservative estimates are given in table 2.

Table 2: Recommended values for wake fraction w

Block coefficient	One propeller	Two propellers
0.5	0.14	0.15
0.6	0.23	0.17
0.7	0.29	0.19
0.8 and above	0.35	0.23

3.14 The required advance coefficient of the propeller is found from the equation:

$$T = \rho u_a^2 D_p^2 K_T(J) / J^2 \quad (5)$$

where D_p is the propeller diameter, $K_T(J)$ is the open water propeller thrust coefficient, $J = u_a / n D_p$, and $u_a = V_s(1 - w)$. J can be found from the curve of $K_T(J)/J^2$.

3.15 The required rotation rate of the propeller, n , in revolutions per second, is found from the relation:

$$n = u_a / (J D_p) \quad (6)$$

3.16 The required delivered power to the propeller at this rotation rate n , P_D in watts, is then defined from the relation:

$$P_D = 2\pi\rho n^3 D_p^5 K_Q(J) \quad (7)$$

where $K_Q(J)$ is the open water propeller torque coefficient curve. Relative rotative efficiency is assumed to be close to 1.0.

3.17 For diesel engines, the available power is limited because of the torque-speed limitation of the engine, $Q \leq Q_{\max}(n)$, where $Q_{\max}(n)$ is the maximum torque that the engine can deliver at the given propeller rotation rate n . Therefore, the required minimum installed MCR is calculated taking into account:

- .1 torque-speed limitation curve of the engine which is specified by the engine manufacturer; and
- .2 transmission efficiency η_s which is to be assumed 0.98 for aft engine and 0.97 for midship engine, unless exact measurements are available.

ANNEX 17

RESOLUTION MEPC.233(65)

Adopted on 17 May 2013

**2013 GUIDELINES FOR CALCULATION OF REFERENCE LINES FOR USE
WITH THE ENERGY EFFICIENCY DESIGN INDEX (EEDI)
FOR CRUISE PASSENGER SHIPS HAVING
NON-CONVENTIONAL PROPULSION**

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee (the Committee) conferred upon it by international conventions for the prevention and control of marine pollution,

RECALLING ALSO that, at its sixty-second session, the Committee adopted, by resolution MEPC.203(62), amendments to the Annex of the Protocol of 1997 to amend the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (inclusion of regulations on energy efficiency for ships in MARPOL Annex VI),

NOTING that regulation 21 (required EEDI) of MARPOL Annex VI, as amended, requires reference lines to be established for each ship type to which regulation 21 is applicable,

HAVING CONSIDERED, at its sixty-fifth session, the draft 2013 Guidelines for calculation of reference lines for use with the Energy Efficiency Design Index (EEDI) for cruise passenger ships having non-conventional propulsion for extension of the application of the EEDI to these ship type,

1. ADOPTS the 2013 Guidelines for calculation of reference lines for use with the Energy Efficiency Design Index (EEDI) for cruise passenger ships having non-conventional propulsion, as set out at annex to the present resolution; and
2. AGREES to keep these Guidelines under review in light of the experience gained.

**2013 GUIDELINES FOR CALCULATION OF REFERENCE LINES FOR USE
WITH THE ENERGY EFFICIENCY DESIGN INDEX (EEDI)
FOR CRUISE PASSENGER SHIPS HAVING
NON-CONVENTIONAL PROPULSION**

Introduction

1 Reference lines are established for each ship type to which regulation 21 (required EEDI) of MARPOL Annex VI is applicable.

2 A reference line is defined as a curve representing an average index value fitted on a set of individual index values for a defined group of ships. One reference line will be developed for each ship type to which regulation 21 of MARPOL Annex VI is applicable, ensuring that only data from comparable ships are included in the calculation of each reference line.

3 The purpose of the EEDI is to provide a fair basis for comparison, to stimulate development of more efficient ships in general and to establish the minimum efficiency of new ships depending on ship type and size. Hence, the reference lines for each ship type must be calculated in a transparent and robust manner.

4 Ship types are defined in regulation 2 of MARPOL Annex VI. The reference line for each ship type is used for calculation of the required EEDI as defined in regulation 21 of MARPOL Annex VI.

Applicability

5 These guidelines apply to cruise passenger ships having non-conventional propulsion, including diesel-electric propulsion, turbine propulsion, and hybrid propulsion systems.

6 For other ship types, refer to the *Guidelines for calculation of reference lines for use with the Energy Efficiency Design Index (EEDI)* in resolution MEPC.215(63).

Reference line value

7 The reference line value for cruise passenger ships having non-conventional propulsion is formulated as

$$\text{Reference line value} = 170.84 \cdot b^{-0.214}$$

where b is the gross tonnage of the ship.

Calculating the reference line

8 To calculate the reference line, an index value for each cruise passenger ship having non-conventional propulsion is calculated using the following assumption:

- .1 The carbon emission factor is constant for all engines, including engines for diesel-electric and hybrid propulsion cruise passenger ships, i.e. $C_{F,ME} = C_{F,AE} = C_F = 3.1144 \text{ g CO}_2/\text{g fuel}$.

The carbon factor for hybrid propulsion ships equipped with gas turbines $C_{F,AE}$ is calculated as an average of the carbon factors of auxiliary engines (i.e. 3.1144 g CO₂/g fuel) and the carbon factor of gas turbines (i.e. 3.206 g CO₂/g fuel) weighted with their installed rated power.

- .2 $P_{ME(i)}$ is reflected as 75 % of the rated installed main power ($MCR_{ME(i)}$). Where a ship only has electric propulsion $P_{ME(i)}$ is zero (0).
- .3 The specific fuel consumption for all ship types, including diesel-electric and hybrid propulsion cruise passenger ships, is constant for all auxiliary engines, i.e. $SFC_{AE}=215\text{g/kWh}$.

The specific fuel consumption for hybrid propulsion cruise passenger ships equipped with gas turbines SFC_{AE} is calculated as an average of the specific fuel oil consumption of the auxiliary engines (i.e. 215 g/kWh) and the specific fuel oil consumption of the gas turbines (i.e. 250 g/kWh) weighted according to their installed rated power.

- .4 P_{AE} is calculated according to paragraph 2.5.6.3 of the 2012 *Guidelines on the Method of Calculation of the Attained Energy Efficiency Design Index (EEDI) for new ships* (resolution MEPC.212(63)) considering a given average efficiency of generator(s) weighted by power of 0.95.
- .5 Innovative mechanical energy efficiency technology, shaft generators and other innovative energy efficient technologies are all excluded from the reference line calculation, i.e. $P_{AE,eff} = 0$ and $P_{eff} = 0$.
- .6 $P_{PTI(i)}$ is 75% of the rated power consumption of each shaft motor divided by a given efficiency of generators of 0.95 and divided by a given propulsion chain efficiency of 0.92.

9 The equation for calculating the index value for cruise passenger ships having non-conventional propulsion is as follows:

$$\text{Estimated Index Value} = \frac{3.1144 \cdot 190 \cdot \sum_{i=1}^{n_{ME}} P_{ME(i)} + C_{F,AE} \cdot SFC_{AE} \cdot (P_{AE} + \sum_{i=1}^{n_{PTI}} P_{PTI(i)})}{\text{Gross tonnage} \cdot V_{ref}}$$

ANNEX 18

RESOLUTION MEPC.234(65)

Adopted on 17 May 2013

**AMENDMENTS TO THE 2012 GUIDELINES ON SURVEY AND CERTIFICATION
OF THE ENERGY EFFICIENCY DESIGN INDEX (EEDI)
(RESOLUTION MEPC.214(63)), AS AMENDED**

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee (the Committee) conferred upon it by international conventions for the prevention and control of marine pollution,

RECALLING ALSO that, at its sixty-second session, the Committee adopted, by resolution MEPC.203(62), amendments to the Annex of the Protocol of 1997 to amend the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (inclusion of regulations on energy efficiency for ships in MARPOL Annex VI),

NOTING the amendments to MARPOL Annex VI adopted at its sixty-second session by inclusion of a new chapter 4 for regulations on energy efficiency for ships entered into force on 1 January 2013,

NOTING ALSO that regulation 5 (Surveys) of MARPOL Annex VI, as amended, requires ships to which chapter 4 applies shall also be subject to survey and certification taking into account guidelines developed by the Organization,

NOTING FURTHER that the *2012 Guidelines on survey and certification of the Energy Efficiency Design Index (EEDI)* were adopted at its sixty-third session,

RECOGNIZING that the amendments to MARPOL Annex VI requires the adoption of relevant guidelines for smooth and uniform implementation of the regulations and to provide sufficient lead time for industry to prepare,

HAVING CONSIDERED, at its sixty-fifth session, draft amendments to the *2012 Guidelines on survey and certification of the Energy Efficiency Design Index (EEDI)*,

1. ADOPTS the amendments to the *2012 Guidelines on survey and certification of the Energy Efficiency Design Index (EEDI)*, as set out in the annex to the present resolution;
2. INVITES Administrations to take the annexed Guidelines into account when developing and enacting national laws which give force to and implement provisions set forth in regulation 5 of MARPOL Annex VI, as amended;
3. REQUESTS the Parties to MARPOL Annex VI and other Member Governments to bring the annexed *Guidelines on survey and certification of the Energy Efficiency Design Index (EEDI)* to the attention of masters, seafarers, shipowners, ship operators and any other interested groups;
4. AGREES to keep these Guidelines under review in light of the experience gained.

**AMENDMENTS TO GUIDELINES ON SURVEY AND CERTIFICATION OF
THE ENERGY EFFICIENCY DESIGN INDEX (EEDI)
(RESOLUTION MEPC.214(63)), AS AMENDED**

Paragraphs 4.3.5, 4.3.6 and 4.3.8 are amended as follows:

"4.3.5 Sea conditions should be measured in accordance with ITTC Recommended Procedure 7.5-04-01-01.1 Speed and Power Trials, part 1; 2012 revision 1 or ISO 15016:2002*.

4.3.6 Ship speed should be measured in accordance with ITTC Recommended Procedure 7.5-04-01-01 Speed and Power Trials, part 1; 2012 revision 1 or ISO 15016:2002*, and at more than two points of which range includes the power of the main engine as specified in paragraph 2.5 of the EEDI Calculation Guidelines.

4.3.8 The submitter should develop power curves based on the measured ship speed and the measured output of the main engine at sea trial. For the development of the power curves, the submitter should calibrate the measured ship speed, if necessary, by taking into account the effects of wind, tide, waves, shallow water and displacement in accordance with ITTC Recommended Procedure 7.5-04-01-01.2 Speed and Power Trials, part 2; 2012 revision 1 or ISO 15016:2002*. Upon agreement with the shipowner, the submitter should submit a report on the speed trials including details of the power curve development to the verifier for verification."

(Annexes 19 to 48 are contained in documents MEPC 65/22/Add.1 and Add.2)

*

ITTC Recommended Procedure 7.5-04-01-01 is considered as preferable standard available from URL at ITTC.SNAME.ORG. Revised version of ISO 15016 should be available by early 2014.

MARINE ENVIRONMENT PROTECTION
COMMITTEE
65th session
Agenda item 22

MEPC 65/22/Add.1
29 May 2013
Original: ENGLISH

**REPORT OF THE MARINE ENVIRONMENT PROTECTION COMMITTEE ON ITS
SIXTY-FIFTH SESSION**

Attached are annexes 19 to 48 to the report of the Marine Environment Protection Committee on its sixty-fifth session (MEPC 65/22).



ANNEX 19

TERMS OF REFERENCE FOR THE UPDATE OF THE 2009 IMO STUDY OF GREENHOUSE GAS EMISSIONS ESTIMATE FOR INTERNATIONAL SHIPPING

Background

MEPC 63 noted that uncertainty exists in the estimates and projections of emissions from international shipping, especially as the current estimate contained in the Second IMO GHG Study 2009 does not take account of the economic downturn experienced globally since 2008.

MEPC 63 agreed that further work should take place to provide the Committee with reliable and up-to-date information to base its decisions on, and requested the Secretariat to investigate possibilities and report to future sessions (MEPC 63/23, paragraph 5.58).

MEPC 64 endorsed, in principle, the outline for an update of the GHG emissions estimate provided in document MEPC 64/5/5 (Secretariat) and agreed that an Expert Workshop be held in 2013 to further consider the methodology and assumptions to be used in the update (MEPC 64/23, paragraph 5.6).

It is recognized that CO₂ is the most significant GHG emitted by ships. The Update Study should be transparent, not policy prescriptive, and include the issues below.

Following an Expert Workshop held at IMO in February 2013 the following terms of reference for this Update Study were agreed by MEPC 65 and are as follows:

Inventories and future scenarios of emissions of GHGs and relevant substances from international shipping¹

1 The Update Study should include global inventories of GHGs and relevant substances for the period prescribed in paragraph 1.3 below emitted from international shipping, methodological aspects and future emission scenarios, described as follows:

- .1 GHGs should be defined as the gases considered under the UNFCCC process: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆);
- .2 other relevant substances that may contribute to climate change include: nitrogen oxides (NO_x), non-methane volatile organic compounds (NMVOC), carbon monoxide (CO), particulate matter (PM) and sulphur oxides (SO_x);
- .3 the inventories should include the annual emission series from 2007 to the year as far as statistical data are available but not earlier than 2011;
- .4 GHGs inventories should be estimated both by top-down and by bottom-up approaches subject to data availability. The top-down approach should be

¹ Refer to paragraphs 21 and 22 of document MEPC 65/5/2.

based on the statistical data on fuel delivered to international shipping². The bottom-up approach should be based on ship activity². The bottom-up approach could investigate fuel deliveries and ship records at ports as means to validate the modelling work based on activity data, on a sampling basis;

- .5 these two inventories³ should be compared and analysed for QA/QC and transparency of these data and, if there are significant discrepancies between the inventory results, these should be explained;
- .6 the inventories of the Update Study should be comparable with those of the Second IMO GHG Study 2009;
- .7 the inventory should include an analysis of uncertainties in the emission estimates;
- .8 the studies should include an explanation of the revision to the methods and data inputs and the impact of those revisions on the updated inventories to the extent possible;
- .9 the methods employed and data used should be laid down transparently in the report and the methods should be scientifically sound; and
- .10 estimations of future shipping emission scenarios should be performed in base-case (business as usual) for the years 2020 and 2050. Economic growth, changes in transport demand, changes in transport routes, as well as expected efficiency improvements should be considered as part of emissions scenarios. Effects of MARPOL Annex VI, as amended, should be taken into account.

Organizational matters

2 While taking into account relevant new information, the authors should not duplicate existing studies that have already been completed. Therefore, in conducting the Update Study, the authors may consult a broad range of reputable organizations, institutions and resources with relevant experience and/or expertise within areas of the terms of reference. The authors should validate the credibility of information obtained. The responsibility for the content of the updated study would rest with the authors.

Steering Committee

3 A Steering Committee should be established by the Committee at its sixty-fifth session. The Steering Committee should be geographically balanced (e.g. with reference to the five United Nations regions), and equitably represent developing and developed countries. Relevant stakeholders should also be represented. The Steering Committee established should be of a manageable size and therefore should be as small as possible.

² For example, the top-down approach should rely on existing statistical sources of fuel delivery data regarding marine uses of fossil fuels, such as international surveys (e.g. IEA) and national statistics on fuel deliveries for marine uses.

In applying the vessel-activity based bottom-up approach to obtain emissions inventory, the update should aim for utilizing, to the best extent possible, actual vessel speed to obtain engine loads. Categorization of vessels should be more refined to reduce bias from taking ship category averages.

³ Alternative sources of data, for example, free data sources, terrestrial and satellite AIS, LRIT, and port call information may be used.

The Steering Committee should:

- .1 act as a focal point for the Committee;
- .2 provide input into the tendering process and approve the study outline; and
- .3 confirm that the study meets the terms of reference, review and monitor the progress of the Update Study.

4 The Steering Committee should, as far as possible, make decisions by consensus, make all efforts to ensure timely completion of the Update Study and undertake most of their work using modern communication methods, e.g. by e-mail and teleconferencing.

Contract and implementation

5 The IMO Secretariat will be responsible for procuring the services of the contractor(s) by 31 July 2013 and supervising the execution of the Update Study.

6 The International Maritime Organization's (IMO) General Terms and Conditions will be applicable to the contract(s).

7 If the tenderer intends to subcontract part of the work or to realize the work in cooperation with another partner, full details will have to be given in the bid. Overall responsibility for the work will remain with the contractor(s).

8 All payments will be made in United States dollars and so quotes should be provided in US dollars. If any currency conversions are required, the rate of exchange will be the official United Nations operational rate applicable on the date of payment.

Delivery of Update Study

9 The final report of the Update Study should be submitted to the sixty-sixth session of the Marine Environment Protection Committee to be held in March 2014.

ANNEX 20

STATEMENT BY A REPRESENTATIVE OF THE UNFCCC SECRETARIAT ON UNFCCC MATTERS

Mr. Chairman, distinguished delegates, Ladies and Gentlemen,

Thank you for giving me the opportunity to address the 65th session of IMO's Marine Environment Protection Committee on behalf of the UNFCCC secretariat.

I would like to use this opportunity to inform this meeting: (i) on the outcome of the Doha Climate Change Conference, and highlight relevant decisions for the international shipping sector, and (ii) on the current work under the Ad Hoc Working Group on the Durban Platform for Enhanced Action (ADP).

Doha Outcome

In Doha, Parties have successfully launched the second commitment period under the Kyoto Protocol. The Kyoto Protocol, as the only existing and binding agreement under which developed countries commit to cutting greenhouse gases, has been amended and will continue as of 1 January 2013 until 2020.

Under the new negotiation process of ADP, Parties agreed a firm timetable to adopt a universal climate agreement by 2015 and agreed a path to raise the level of ambition to respond to climate change from now until 2020.

Parties also successfully concluded the work under the Bali Action Plan launched under the Convention in 2007. They endorsed the completion of new institutions and agreed ways and means to deliver scaled-up climate finance and technology to developing countries.

In Doha, emissions from international transport were addressed in negotiations under the AWG-LCA agenda item on sectoral approaches; and under the SBSTA agenda item on emissions from fuel used for international transport, which currently serves as the platform to receive information from IMO and ICAO.

Under the AWG-LCA, Parties were unable to find consensus on the item on sectoral approaches. As a result, it was not included in the agreed outcome pursuant to the Bali Action Plan (Decision 1/CP.18).

Under the SBSTA Parties took note of the information provided by ICAO and IMO on recent progress in addressing emissions from fuel used in international aviation and maritime transport. The SBSTA invited the secretariats of both organizations to continue reporting on relevant work in their respective areas at future SBSTA sessions.

Work under the ADP

Mr. Chairman, let me now provide a snapshot of the current work under the ADP.

The ADP was launched in Durban for Parties to negotiate a new, universal climate agreement by 2015, to come into force from 2020; and to find ways to accelerate and catalyze existing climate action towards closing the gap between our collective ambition and the demands of science before 2020.

During the 2nd session of the ADP last month in Bonn, Parties worked constructively towards the objectives of the ADP.

On the new agreement, they started to build consensus on the need to construct an innovative set of ways for all countries to commit to climate actions that are compatible with their national circumstances and that the contours of the new agreement must integrate action across all levels of governance.

On the level of ambition, they recognised that there are many existing opportunities to scale up existing mitigation actions; that low-emission and high resilience development requires cooperation among the governments and across government ministries; and that there is a need to build up sufficient financial means to implement action.

Closing

Mr. Chairman, in this regard any action to address GHG emissions from international maritime transport under the IMO can help Parties in their decisions under the UNFCCC and can complement countries actions towards low-emission development and towards closing the ambition gap.

Thank you, Mr. Chairman.

ANNEX 21

RESOLUTION MEPC.235(65)

Adopted on 17 May 2013

**AMENDMENTS TO THE ANNEX OF THE PROTOCOL OF 1978 RELATING TO
THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF
POLLUTION FROM SHIPS, 1973**

**(Amendments to Form A and Form B of Supplements to the IOPP Certificate
under MARPOL Annex I)**

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee conferred upon it by international conventions for the prevention and control of marine pollution,

NOTING article 16 of the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1973 Convention") and article VI of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1978 Protocol") which together specify the amendment procedure of the 1978 Protocol and confer upon the appropriate body of the Organization the function of considering and adopting amendments to the 1973 Convention, as modified by the 1978 Protocol (MARPOL),

HAVING CONSIDERED draft amendments to Form A and Form B of Supplements to the IOPP Certificate under Annex I of MARPOL,

1. ADOPTS, in accordance with article 16(2)(d) of the 1973 Convention, the amendments to Form A and Form B of Supplements to the IOPP Certificate under Annex I of MARPOL, the text of which is set out in the annex to the present resolution;
2. DETERMINES, in accordance with article 16(2)(f)(iii) of the 1973 Convention, that the amendments shall be deemed to have been accepted on 1 April 2014 unless, prior to that date, not less than one third of the Parties or Parties the combined merchant fleets of which constitute not less than 50 per cent of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objection to the amendments;
3. INVITES the Parties to note that, in accordance with article 16(2)(g)(ii) of the 1973 Convention, the said amendments shall enter into force on 1 October 2014 upon their acceptance in accordance with paragraph 2 above;
4. REQUESTS the Secretary-General, in conformity with article 16(2)(e) of the 1973 Convention, to transmit to all Parties to MARPOL certified copies of the present resolution and the text of the amendments contained in the annex;
5. REQUESTS FURTHER the Secretary-General to transmit to the Members of the Organization which are not Parties to MARPOL copies of the present resolution and its Annex.

* * *

ANNEX

**AMENDMENTS TO FORM A AND FORM B OF SUPPLEMENTS
TO THE IOPP CERTIFICATE UNDER MARPOL ANNEX I**

1 Amendments to the Supplement to the IOPP Certificate (Form A)

The existing paragraph 3.2.1 is replaced by the following:

"3.2.1 Incinerator for oil residues (sludge).....☐"

2 Amendments to the Supplement to the IOPP Certificate (Form B)

The existing paragraph 3.2.1 is replaced by the following:

"3.2.1 Incinerator for oil residues (sludge).....☐"

ANNEX 22

RESOLUTION MEPC.236(65)

Adopted on 17 May 2013

**AMENDMENTS TO THE CONDITION ASSESSMENT SCHEME
UNDER MARPOL ANNEX I**

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee conferred upon it by international conventions for the prevention and control of marine pollution,

NOTING article 16 of the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1973 Convention") and article VI of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1978 Protocol") which together specify the amendment procedure of the 1978 Protocol and confer upon the appropriate body of the Organization the function of considering and adopting amendments to the 1973 Convention, as modified by the 1978 Protocol (MARPOL),

NOTING ALSO that regulation 20.6 of Annex I of MARPOL specifies that the Condition Assessment Scheme, adopted by resolution MEPC.94(46), as may be amended, provided such amendments shall be adopted, brought into force and take effect in accordance with the provisions of article 16 of the 1973 Convention relating to amendment procedures applicable to an appendix to an annex,

RECALLING ALSO resolutions MEPC.99(48), MEPC.112(50), MEPC.131(53) and MEPC.155(55) by which the Committee adopted amendments to the Condition Assessment Scheme, in accordance with the provisions of article 16 of the 1973 Convention relating to amendment procedures applicable to an appendix to an annex,

RECOGNIZING the need to amend the Condition Assessment Scheme, replacing references to resolution A.744(18) in view of the adoption by the Assembly, at its twenty-seventh session, of the International Code on the enhanced programme of inspections during surveys of bulk carriers and oil tankers, 2011 (2011 ESP Code) by resolution A.1049(27),

HAVING CONSIDERED at its sixty-fifth session, the proposed amendments to the Condition Assessment Scheme,

1. ADOPTS, in accordance with article 16(2)(d) of the 1973 Convention, the amendments to the Condition Assessment Scheme, the text of which is set out in the annex to the present resolution;

2. DETERMINES, in accordance with article 16(2)(f)(iii) of the 1973 Convention, that the amendments shall be deemed to have been accepted on 1 April 2014, unless, prior to that date, not less than one third of the Parties to MARPOL or Parties the combined merchant fleets of which constitute not less than 50 per cent of the gross tonnage of the world's merchant fleet, have notified to the Organization their objections to the amendments;

3. INVITES Parties to MARPOL to note that, in accordance with article 16(2)(g)(ii) of the 1973 Convention, the said amendments shall enter into force on 1 October 2014 upon their acceptance in accordance with paragraph 2 above;
4. REQUESTS the Secretary-General, in conformity with article 16(2)(e) of the 1973 Convention, to transmit to all Parties to MARPOL certified copies of the present resolution and the text of the amendments contained in the annex;
5. REQUESTS FURTHER the Secretary-General to transmit copies of this resolution and its annex to Members of the Organization which are not Parties to MARPOL; and
6. INVITES the Maritime Safety Committee to note the amendments to the Condition Assessment Scheme.

* * *

ANNEX

**AMENDMENTS TO THE CONDITION ASSESSMENT SCHEME
(RESOLUTION MEPC.94(46), AS AMENDED)**

1 After paragraph 1.5, the following new paragraph is inserted:

"1.6 The Assembly, at its twenty-seventh session, adopted the *International Code on the enhanced programme of inspections during surveys of bulk carriers and oil tankers, 2011 (2011 ESP Code)* (resolution A.1049(27)) and the Maritime Safety Committee, at its ninetieth session, adopted, by resolution MSC.325 (90), amendments to SOLAS regulation XI-1/2, replacing "resolution A.744(18)" with "the 2011 ESP Code" and thereby making the Code mandatory. Therefore, the references to "resolution A.744(18)" in the CAS are replaced by references to "the 2011 ESP Code (resolution A.1049(27))"."

2 In paragraphs 3.10, 6.2.1.3, 6.2.2.9, 7.3.1, 7.3.4, 7.3.7 and 8, the reference to "resolution A.744(18), as amended" is replaced by a reference to "the 2011 ESP Code".

3 In appendix 2, in the section "Inspections by the Company", the reference to "resolution A.744(18), as amended" is replaced by a reference to "the 2011 ESP Code".

4 In appendix 3, in section 8, the reference to "resolution A.744(18), as amended" is replaced by a reference to "the 2011 ESP Code".

ANNEX 23

RESOLUTION MEPC.237(65)

Adopted on 17 May 2013

**ADOPTION OF THE CODE FOR RECOGNIZED ORGANIZATIONS
(RO CODE)**

Text of the Code for Recognized Organizations is contained in document MEPC 65/22/Add.2, which will be issued after the adoption of the same code by MSC 92.

MARINE ENVIRONMENT PROTECTION
COMMITTEE
65th session
Agenda item 22

MEPC 65/22/Add.2
15 July 2013
Original: ENGLISH

**REPORT OF THE MARINE ENVIRONMENT PROTECTION COMMITTEE
ON ITS SIXTY-FIFTH SESSION**

Attached is annex 23 to the report of the Marine Environment Protection Committee on its sixty-fifth session (MEPC 65/22).



ANNEX 23

**RESOLUTION MEPC.237(65)
(Adopted on 17 May 2013)**

CODE FOR RECOGNIZED ORGANIZATIONS (RO CODE)

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee (the Committee) conferred upon it by international conventions for the prevention and control of marine pollution,

RECALLING ALSO resolution A.739(18) entitled *Guidelines for the authorization of organizations acting on behalf of the Administration* and resolution A.789(19) entitled *Specifications on the survey and certification functions of recognized organizations acting on behalf of the Administration*, which have become mandatory under both chapter 2 of annex I and chapter 3 of annex II to the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating hereto (MARPOL), and under the 1974 SOLAS Convention and the 1988 Load Lines Protocol,

RECOGNIZING the need to update the aforementioned resolutions, gather all the applicable requirements for recognized organizations in a single IMO mandatory and assist in achieving harmonized and consistent global implementation of requirements established by IMO instruments for the assessment and authorization of recognized organizations,

RECOGNIZING ALSO the need for a code to provide, as far as national laws allow, a standard approach to assist the Administrations in meeting their responsibilities in recognizing, authorizing and monitoring their recognized organizations,

NOTING resolution MEPC.238(65), by which it adopted, inter alia, amendments to Annexes I and II of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (hereafter referred to as the 1978 Protocol) to make the provisions of part 1 and part 2 of the Code for recognized organizations (RO Code) mandatory under MARPOL,

HAVING CONSIDERED, at its sixty-fifth session, the text of the proposed Code for recognized organizations,

CONSIDERING that it is highly desirable for the Code for recognized organizations to be made mandatory under the 1974 SOLAS Convention, the 1988 Load Lines Protocol and MARPOL to remain identical,

1. ADOPTS the Code for recognized organizations, the text of which is set out in the annex to the present resolution;
2. INVITES all Parties to the 1978 Protocol to note that the RO Code will take effect on 1 January 2015 upon the entry into force of the respective amendments to Annex I and Annex II of MARPOL;

3. REQUESTS the Secretary-General to transmit certified copies of the present resolution and the text of the RO Code contained in the annex to all Parties to the 1978 Protocol;
4. FURTHER REQUESTS the Secretary-General to transmit copies of this resolution and the annex to all Members of the Organization which are not Parties to the 1978 Protocol;
5. RECOMMENDS Governments concerned to use the recommendatory provisions contained in part 3 of the RO Code as a basis for relevant standards, unless their national requirements provide at least an equivalent degree.

* * *

ANNEX

CODE FOR RECOGNIZED ORGANIZATIONS (RO CODE)

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PREAMBLE

The *Code for Recognized Organizations (RO Code)* was adopted by the Organization by resolutions MSC.349(92) and MEPC.237(65).

This Code:

- .1 provides flag States with a standard that will assist in achieving harmonized and consistent global implementation of requirements established by the instrument of the International Maritime Organization (IMO) for the assessment and authorization of recognized organizations (ROs);
- .2 provides flag States with harmonized, transparent and independent mechanisms, which can assist in the consistent oversight of ROs in an efficient and effective manner; and
- .3 clarifies the responsibilities of organizations authorized as ROs for a flag State and overall scope of authorization.

PART 1

GENERAL

1 PURPOSE

The Code serves as the international standard and consolidated instrument containing minimum criteria against which organizations are assessed towards recognition and authorization and the guidelines for the oversight by flag States.

2 SCOPE

2.1 The Code applies to:

- .1 all organizations being considered for recognition or that are recognized by a flag State to perform, on its behalf, statutory certification and services under mandatory IMO instruments and national legislation; and
- .2 all flag States that intend to recognize an organization to perform, on their behalf, statutory certification and services under mandatory IMO instruments.

2.2 The Code establishes:

- .1 the mandatory requirements that an organization shall fulfil to be recognized by a flag State (part 1);
- .2 the mandatory requirements that an RO shall fulfil when performing statutory certification and services on behalf of its authorizing flag States (part 2);
- .3 the mandatory requirements that flag States shall adhere to when authorizing an RO (part 2); and
- .4 guidelines for flag State oversight of ROs (part 3).

2.3 The Code defines the functional, organizational and control requirements that apply to ROs conducting statutory certification and services performed under mandatory IMO instruments, such as, but not limited to, SOLAS, MARPOL and the Load Lines Conventions.

2.4 All requirements of the Code are generic and applicable to all ROs, regardless of their type and size and the statutory certification and services provided.

2.5 ROs subject to this Code need not offer all types of statutory certification and services and may have a limited scope of recognition, provided that the requirements of this Code are applied in a manner that is compatible with the limited scope of recognition. Where any requirement of this Code cannot be applied due to the scope of services delivered by an RO, this shall be clearly identified by the flag State and recorded in the RO's quality management system.

3 CONTENTS

The Code consists of three parts. Part 1 contains general provisions. Part 2 contains mandatory provisions for the flag State and RO as already contained in relevant IMO instruments and applicable international standards. Part 3 contains guidelines for the oversight of ROs by flag States.

4 DELEGATION OF AUTHORITY

4.1 A flag State may delegate authority to an organization recognized as complying with the provisions of this Code to perform, on its behalf, statutory certification and services under mandatory IMO instruments and its national legislation.

4.2 The flag State shall not authorize functions beyond RO's capabilities. In this respect, the flag State shall take into consideration appendix 2 of this Code for authorization.

4.3 Flag States should cooperate with each other with the objective of ensuring that ROs to whom they delegate authority adhere to the provisions of this Code.

5 COMMUNICATION OF INFORMATION

The flag State shall communicate to, and deposit with, the Secretary-General of IMO a list of ROs for circulation to the interested parties for information of their officers, and a notification of the specific responsibilities and conditions of the authority delegated to ROs.

6 REFERENCES

The Code is based on the following referenced documents:

- .1 mandatory IMO instruments and IMO Guidelines and recommendations (i.e. Codes, guidelines and standards recommended by the Organization);
- .2 ISO 9000:2005, Quality Management Systems – Fundamentals and vocabulary;
- .3 ISO 9001:2008, Quality Management Systems – Requirements;
- .4 ISO/IEC 17020:1998, General criteria for the operation of various types of bodies performing inspection;

- .5 ISO 19011:2002, Guidelines for quality and/or environmental management systems auditing;
- .6 International Association of Classification Societies (IACS) Quality Management System Requirements (QMSR); and
- .7 national legislation.

PART 2

RECOGNITION AND AUTHORIZATION REQUIREMENTS FOR ORGANIZATIONS

1 TERMS AND DEFINITIONS

1.1 *Recognized organization (RO)* means an organization that has been assessed by a flag State, and found to comply with this part of the RO Code.

1.2 *Authorization* means the delegation of authority to an RO to perform statutory certification and services on behalf of a flag State as detailed in an agreement or equivalent legal arrangement taking into account the "Elements to be included in an Agreement" as set out in appendix 3 of this Code.

1.3 *Statutory certification and services* means certificates issued, and services provided, on the authority of laws, rules and regulations set down by the Government of a sovereign State. This includes plan review, survey, and/or audit leading to the issuance of, or in support of the issuance of, a certificate by or on behalf of a flag State as evidence of compliance with requirements contained in an international convention or national legislation. This includes certificates issued by an organization recognized by the flag State in accordance with the provisions of SOLAS regulation XI-1/1, and which may incorporate demonstrated compliance with the structural, mechanical and electrical requirements of the RO under the terms of its agreement of recognition with the flag State.

1.4 *Assessment* means any activity to determine that the assessed entity fulfils the requirements of the relevant rules and regulations.

1.5 *Interested parties* means any person or legal entity who can demonstrate a justified interest in the survey and certification process and includes, inter alia, clients of the RO, shipowners, ship operators, shipbuilders, equipment manufacturers, shipping industry interests or associations, marine insurance interests or associations, trade associations, governmental regulatory bodies or other governmental services and non-governmental organizations.

1.6 *Location* is a place from which surveys are carried out and managed, or where plan approval is carried out, or from which processes are managed.

1.7 *Site* is the place at which a surveyor is based to cover a specific contract or a series of contracts including; but not limited to, a port, shipyard, firm, and company. All statutory certification and services at sites are to be controlled by a location.

1.8 A *Vertical Contract Audit (VCA)* is a contract/order specific audit of production processes, including witnessing work during attendance at a survey, audit or plan approval in progress and, as applicable, including relevant sub-processes. A VCA is carried out at a location or a site (Survey Station/Approval Office/Site) to verify the correct application of

relevant requirements in service realization for the specific work in that contract/order, and their interactions (relevant sub-processes include e.g. previous part surveys or UTM processes connected to the survey). Plan approval VCA may be carried out for completed tasks.

2 GENERAL REQUIREMENTS FOR RECOGNIZED ORGANIZATIONS

2.1 General

Delegation of authority by a flag State to an organization shall be subject to the confirmation of the capability of that organization to demonstrate that it has the capacity to deliver high standards of service and its compliance with the requirements of this Code and applicable national legislation.

2.2 Rules and regulations

The RO shall establish, publish and systematically maintain its rules or regulations, a version of which shall be provided in the English language, for the design, construction and certification of ships and their associated essential engineering systems as well as provide for adequate research capability to ensure appropriate updating of the published criteria.

2.3 Independence

The RO and its staff shall not engage in any activities that may conflict with their independence of judgement and integrity in relation to their statutory certification and services. The RO and its staff responsible for carrying out the statutory certification and services shall not be the designer, manufacturer, supplier, installer, purchaser, owner, user or maintainer of the item subject to the statutory certification and services, nor the authorized representative of any of these parties. The RO shall not be substantially dependent on a single commercial enterprise for its revenue.

2.4 Impartiality

2.4.1 The personnel of ROs shall be free from any pressures, which might affect their judgement in performing statutory certification and services. Procedures shall be implemented to prevent persons or organizations external to the organization from influencing the results of services carried out.

2.4.2 All potential customers shall have access to statutory certification and services provided by the RO without undue financial or other conditions. The procedures under which the RO operates shall be administered in a non-discriminatory manner.

2.5 Integrity

The RO shall be governed by the principles of ethical behaviour, which shall be contained in a Code of Ethics. The Code of Ethics shall recognize the inherent responsibility associated with a delegation of authority to include assurance of adequate performance of services.

2.6 Competence

The RO shall perform statutory certification and services by the use of competent surveyors and auditors who are duly qualified, trained and authorized to execute all duties and activities incumbent upon their employer, within their level of work responsibility.

2.7 Responsibility

The RO shall define and document the responsibilities, authorities, qualifications and interrelation of personnel whose work affects the quality of its services.

2.8 Transparency

2.8.1 Transparency reflects the principle of access to, or disclosure of, all information related to the statutory certification and services carried out by the RO on behalf of a flag State.

2.8.2 The ROs shall communicate information to the flag State as described in the section on communication/cooperation with the flag State.

2.8.3 Information concerning the status of ships certified by ROs shall be made available to the public.

3 MANAGEMENT AND ORGANIZATION

3.1 General

The RO shall, based on the provisions of this Code, develop and implement a quality management system and shall continually improve its effectiveness.

3.2 Quality, safety and pollution prevention policy

The RO shall define and document its policy and objectives for, and commitment to, quality, safety and pollution prevention. In particular, the RO's management shall:

- .1 ensure that the policy and objectives are established;
- .2 ensure the policy and objectives are appropriate for the purpose of the organization;
- .3 communicate the policy and objectives; including provisions applicable to the statutory certification and services, to the organization and ensure that it is understood within the organization;
- .4 ensure sufficient availability of resources;
- .5 include a commitment to comply with all applicable requirements and continually improve the effectiveness of the quality management system;
- .6 conduct management reviews; which includes a framework for reviewing quality objectives; and
- .7 review the quality policy, objectives and the quality management system for continuing suitability.

3.3 Documentation requirements

3.3.1 The quality management system shall include the following documentation:

- .1 quality policy and quality objectives;
- .2 quality manual (refer to section 3.4);
- .3 procedures and records required by this Code and the national legislation of the recognizing flag State;
- .4 procedures to ensure the effective planning, operation, and control of the RO's processes;
- .5 rules and regulations as applicable to the RO's areas of authorization;
- .6 list of ships for which statutory certification and services are provided;
- .7 other documented process procedures that are considered necessary (these include any circulars or letters, which provide the surveyors and administrative staff with up-to-date information on classification, statutory and related matters);
- .8 specifications and diagrams defining or amplifying service processes; and
- .9 pro-forma reports, checklists and certificates appropriate to the activities covered by this certification.

3.3.2 The quality management system shall also include external documents, such as:

- .1 national and international standards necessary for the activities governed by this instrument;
- .2 IMO Conventions and resolutions;
- .3 national shipping regulations and standards appropriate to the authorization of the RO;
- .4 documents and data submitted to the RO for verification and/or approval; and
- .5 specified correspondence defined by the RO to be of an important nature.

3.4 Quality manual

The RO shall establish and maintain a quality manual that includes:

- .1 scope of the quality management system, including details of, and justification for any exclusions;
- .2 management statement on its policy and objectives for, and commitment to, quality;

- .3 description of the RO's areas of activity and competence;
- .4 general information about the organization and its head office (name, address, phone number, etc., and legal status);
- .5 information on the RO's relationship to its parent or associated organizations (where applicable);
- .6 charts describing the organization's structure;
- .7 management statement assigning a person designated who is responsible for the organization's quality management system;
- .8 relevant job descriptions;
- .9 policy statement on qualification and training of personnel;
- .10 documented procedures established for the quality management system, or reference to them;
- .11 description of the interaction between processes of the quality management system; and
- .12 description of all other documents required by the quality management system.

3.5 Control of documents

3.5.1 Documents required by the quality management system shall be controlled. The provision of document control shall apply to any type of document, including but not limited to; electronic media and IT applications where said electronic media may affect the reliability of the service or of the recorded data.

3.5.2 A documented procedure shall be established to define the controls needed to:

- .1 approve documents for adequacy prior to issue;
- .2 review and update as necessary and re-approve documents;
- .3 ensure that changes and the current revision status of documents are identified;
- .4 ensure that relevant versions of applicable documents are available at points of use;
- .5 ensure that documents remain legible and readily identifiable;
- .6 ensure that documents of external origin determined by the RO to be necessary for the planning and operation of the quality management system are identified and their distribution is controlled; and
- .7 prevent the unintended use of obsolete documents, and to apply suitable identification if they are retained for any purpose.

3.6 Control of records

3.6.1 Records shall be established to provide evidence of conformity to requirements of this Code and of the effective operation of the quality management system. The records shall be controlled.

3.6.2 The RO shall establish a documented procedure to define the controls needed for the identification, storage, protection, retrieval, retention, and disposition of records. Records shall remain legible, readily identifiable and retrievable.

3.6.3 The RO shall ensure that records are maintained, demonstrating achievement of the required standards in the terms covered by the statutory certification and services performed as well as the effective operation of the quality management system. Records, other than those set out in 3.6.4.2, shall be retained at least for the period for which statutory certification and services are provided by the RO. Records specified in 3.6.4.2 for a ship shall be retained for a minimum period of three years beyond the period for which statutory certification and services are provided by the RO to that ship, or a longer period if specified in the agreement between the flag State and the RO.

3.6.4 Records shall include at least those relevant to:

- .1 rules and regulations development and associated research;
- .2 the application of the rules and regulations and statutory requirements through:
 - .1 verification and/or approval of documents and/or drawings relevant to the design;
 - .2 approval and survey of materials and equipment;
 - .3 survey during construction and installation;
 - .4 survey during service; and
 - .5 issuance of certificates;
- .3 the list of ships; and
- .4 all other records required by this quality management system and any additional requirements established by the recognizing flag State.

3.7 Planning

3.7.1 The RO shall ensure that quality objectives, including those needed to meet the requirements for statutory certification and services are established at relevant functions and levels within the organization.

3.7.2 The quality objectives shall be measurable and consistent with the quality policy.

3.7.3 The RO shall in its planning consider the elements identified below, and use the result to evaluate the effectiveness of its standards and procedures and their impact on safety of life and property and the marine environment:

- .1 that the planning of the quality management system is carried out in order to meet the requirements of the mandatory IMO Instruments, including but not limited to this Code, its quality management system and the authorizing flag State's national legislation;
- .2 that the integrity of the quality management system is maintained when changes to the quality management system are planned and implemented;
- .3 that the needs and expectations of the customers and other interested parties are taken into account, e.g. feedback from IMO, flag States and industry associations;
- .4 the effectiveness of services based on statistics from port State control, casualties, loss trends and feedback obtained from internal and external users;
- .5 the performance of the quality management system processes based on feedback from internal audits, non-conformities and internal comments;
- .6 lessons learned from previous experience and deriving from an examination of survey reports, casualty investigations or external sources; and
- .7 other sources of information which identifies opportunities for improvement.

3.7.4 The RO shall identify and plan the processes required for the quality management system, and determine the sequence and interaction of these processes.

3.7.5 The RO shall determine the requirements to be complied with and the criteria to ensure both the operation and control of these processes, including the criteria for acceptance, and evaluate the resources needed.

3.7.6 The RO shall plan and develop the processes required for statutory certification and services. Planning of the delivery of statutory certification and services shall be consistent with the requirements of other processes of the quality management system.

3.7.7 In planning the delivery of statutory certification and services, the RO shall determine the following as appropriate:

- .1 quality objectives and requirements for statutory certification and services;
- .2 the need to establish processes and documents, and to provide resources specific to the activity;
- .3 required verification, validation, monitoring, measurement, inspection and test activities and the criteria for acceptance; and
- .4 records needed to provide evidence that statutory certification and services meet the quality management system requirements; the requirements set out in the Code and the national legislation of the recognizing flag State.

3.7.8 The output of this planning shall be in a form suitable for the RO's structure and method of operations. The output of the planning should consider:

- .1 responsibility and authority for developing improvement plans;
- .2 skills and knowledge needed;
- .3 improvement approaches, methodology and tools;
- .4 resource requirements;
- .5 alternative planning needs;
- .6 indicators for performance achievements; and
- .7 the need for documentation and records.

3.8 Organization

3.8.1 The relative size, structure, experience, and capability of the RO shall be commensurate with the type and degree of the statutory certification and services authorized by the flag State.

3.8.2 The RO shall demonstrate that it has the technical, administrative, and managerial competence and capacity to ensure the provision of quality services in a timely manner.

3.8.3 The RO shall appoint a member of its management who, irrespective of other responsibilities, shall have responsibility and authority that includes:

- .1 ensuring that processes needed for the quality management system are established, implemented, and maintained;
- .2 ensuring that processes required for the effective delivery of statutory certification and services are established, implemented and maintained;
- .3 reporting to top management on the performance of the quality management system; the delivery of statutory certification and services and any need for improvement; and
- .4 ensuring the promotion of awareness of all requirements throughout the RO.

3.8.4 The RO shall ensure that the responsibilities and authorities are defined and communicated within the RO.

3.9 Communication

3.9.1 *Internal communication*

The RO shall ensure that appropriate communication processes are established within the RO and that communication takes place regarding the effectiveness of the quality management system and statutory certification and services provided.

3.9.2 *Communication/cooperation with flag State*

3.9.2.1 The RO shall establish appropriate communication processes with the authorizing flag State that, inter alia, address the following:

- .1 information specified by the flag State in terms of authorization;
- .2 classification of ships (assignments of class, changes and withdrawals), as applicable;
- .3 cases where a ship did not in all respects remain fit to proceed to sea without danger to the ship or persons on board or presenting unreasonable threat of harm to the marine environment;
- .4 information on all overdue surveys, overdue recommendations or overdue conditions of class, operating conditions or operating restrictions issued against their classed ships that shall be made available upon request by the authorizing flag State; and
- .5 other information as so specified by the authorizing flag State.

3.9.2.2 The RO shall allow participation in the development of its rules and/or regulations by the flag State.

3.9.2.3 The RO shall determine, propose and, if agreed by the flag State, implement effective arrangements for communicating with a flag State in relation to:

- .1 enquiries, contracts or other handling, including amendments; and
- .2 flag State feedback, including conformity issues pertaining to statutory certification and services.

3.9.3 *Cooperation between ROs*

3.9.3.1 Under the framework established by the flag State, the ROs shall cooperate and share relevant experience with other ROs with the view to standardizing processes concerning statutory certification and services for the flag State, as appropriate.

3.9.3.2 Under the framework established by a flag State or a group of flag States, the organizations recognized by this State or these States shall establish and maintain appropriate technical and safety-related cooperation processes regarding statutory certification and services of ships, which may affect the validity of certificates issued by other ROs either in whole or in part on behalf of the said flag State(s). Flag States shall seek to mutually cooperate in order to ensure, as far as practicable, the compatibility of their respective frameworks.

3.9.3.3 No flag State shall mandate its ROs to apply to ships, other than those entitled to fly its flag, any requirement pertaining to their classification rules, requirements, procedures or performance of other statutory certification processes, beyond convention requirements and the mandatory instruments of the IMO.

3.9.3.4 In cases of transfer of the certification of the ship from one RO to another, the losing organization shall, without undue delay, provide the gaining organization access to the history file of the ship including:

- .1 any overdue surveys;
- .2 any overdue recommendations and overdue conditions of class;
- .3 operating conditions issued against the ship;
- .4 operating restrictions issued against the ship; and
- .5 technical information, drawings, plans and documents taking into account the relevant guidelines developed by the Organization¹.

3.9.3.5 New certificates for the ship can be issued by the gaining organization only after all overdue surveys have been satisfactorily completed and all overdue recommendations or overdue conditions of class previously issued in respect of the ship have been completed as specified by the losing organization.

3.9.3.6 Within one month from the issuance of the certificates, the gaining organization shall advise the losing organization of the date of issue of the certificates and confirm the date, place and action taken to satisfy each overdue survey, overdue recommendation and overdue condition of class.

3.9.3.7 ROs shall establish and implement appropriate common requirements concerning cases of transfer of the certification of a ship where special precautions are necessary. Those cases shall, as a minimum, include the certification of ships of 15 years of age or over and the transfer of a ship from an organization not recognized by the flag State of the ship.

3.10 Management review

3.10.1 General

The management of an RO shall review its quality management system; including a review of the RO's performance of statutory certification and services, at planned intervals, which shall not exceed 13 months, to ensure its continuing suitability, adequacy, and effectiveness. This review shall include assessing opportunities for improvement and the need for changes to the quality management system, including the quality policy and quality objectives.

3.10.2 Review input

The input to management review shall include the following information:

- .1 results of audits;
- .2 feedback from interested parties;
- .3 process performance and consistency of compliance with statutory requirements;

¹ MSC-MEPC.5/Circ.2 – *Guidelines for Administrations to ensure the adequacy of transfer of class-related matters between recognized organizations (ROs).*

- .4 status of preventive and corrective actions;
- .5 follow-up actions from previous management reviews;
- .6 changes that could affect the quality management system; and
- .7 recommendations for improvement.

Any output of management reviews containing information relevant to quality objectives, customer complaints and activity monitoring, throughout the RO, shall be used as input to the top management review.

3.10.3 Review output

3.10.3.1 The output from management review shall include any decisions and actions related to:

- .1 improvement of the effectiveness of the quality management system and its processes;
- .2 improvement of services related to the requirements established in the authorization agreement; and
- .3 resource requirements.

3.10.3.2 Top management shall ensure that the results of the top management review of the quality management system, including the derived quality objectives, are documented and communicated throughout the organization, as appropriate.

3.10.3.3 Records from management reviews shall be maintained.

4 RESOURCES

4.1 General

4.1.1 The RO shall determine and provide the adequate resources in terms of technical, managerial and survey capabilities to accomplish the tasks being assigned and resources needed to implement the quality management system and to continually improve its effectiveness; and to enhance its performance in the delivery of statutory certification and services.

4.1.2 The RO shall be able to document extensive experience in assessing the design, construction and equipment of ships and the capability to effectively perform statutory certification and services on behalf of a flag State.

4.1.3 The RO shall have the capacity to:

- .1 provide for the publication and systematic maintenance of rules and/or regulations for the design, construction and certification of ships and their associated essential engineering systems as well as the provision of an adequate research capability to ensure appropriate updating of the published criteria. The RO is required to maintain an up-to-date version of this publication in the English language; and
- .2 allow participation in the development of its rules and/or regulations by representatives of the flag State and other interested parties.

4.2 Personnel

4.2.1 The RO shall be equipped, at all times, with significant managerial, technical, support and research staff commensurate with the size of the fleet in its class, its composition and the organization's involvement in the construction, repair and conversion of ships. The RO shall be capable of assigning to every place of work, when and as needed, the means and staff commensurate with the tasks to be carried out in accordance with the requirements of this Code and those of the flag State.

4.2.2 The management of an RO shall have the competence, capability and capacity to organize, manage and control the performance of statutory certification and services in order to verify compliance with requirements relevant to the tasks delegated and shall, inter alia:

- .1 possess an adequate number of competent supervisory, technical appraisal and survey personnel;
- .2 develop and maintain appropriate procedures and instructions;
- .3 maintain up-to-date documentation on interpretation of the relevant instruments;
- .4 give technical and administrative support to field staff; and
- .5 review survey reports and plan approval letters for accuracy, compliance with requirements and to provide experience feedback for continual improvement.

4.2.3 The RO shall be established with a qualified staff to provide the required service representing an adequate geographical coverage and local representation as required.

4.2.4 The RO shall perform statutory certification and services by the use of only exclusive surveyors and auditors, being persons solely employed by the RO, duly qualified, trained and authorized to execute all duties and activities incumbent upon their employer, within their level of work responsibility. While still remaining responsible for the certification on behalf of the flag State, the RO may subcontract radio surveys to non-exclusive surveyors in accordance with section 5.9 of part 2 of this Code.

4.2.5 The RO's personnel performing and responsible for statutory certification and services shall have, as a minimum, the following formal education:

- .1 qualifications from a tertiary institution within a relevant field of engineering or physical science (minimum two-year programme); or
- .2 qualifications from a marine or nautical institution and relevant seagoing experience as a certificated ship officer, and
- .3 proficiency in the English language commensurate with the scope of statutory certification and services.

4.2.6 Other personnel assisting in the performance of statutory work shall have education, training and supervision commensurate with the tasks they are authorized to perform.

4.2.7 The RO shall have a documented system to track the qualifications of personnel; including continuous updating of their knowledge as appropriate to the tasks they are authorized to undertake. This system shall comprise appropriate training courses, including, inter alia, international instruments and appropriate procedures related to the delivery of statutory certification and services, as well as practical tutored training; it shall provide documented evidence of satisfactory completion of the training. As a minimum, the provisions in appendices 1 and 2 shall be met.

4.3 Infrastructure

4.3.1 The RO shall determine, provide, and maintain the infrastructure required to perform statutory certification and services in accordance with the requirements of the mandatory IMO instruments. Infrastructure includes, as applicable:

- .1 building, workspaces and associated utilities;
- .2 process equipment (both hardware and software); and
- .3 supporting services, including but not limited to transport, communication, training and information systems.

4.3.2 Systems (hardware and software) provided to the surveyor shall be identified and relevant training on their use shall be carried out and documented. Special consideration should be given to the situation where a surveyor is working out of a home-based office.

4.4 Work environment

4.4.1 The RO shall be satisfied that the work environment is safe and effective to perform statutory certification and services. While it is understood that such environmental conditions are not provided by the RO, the environmental conditions under which the survey will be permitted to take place shall be made clear to the customer prior to survey commencing.

4.4.2 The RO shall determine the necessary working procedures required to perform statutory certification and services safely and effectively. Training of staff on personal safety shall be carried out and documented.

4.4.3 Requirements for personal protective equipment to be used while performing statutory certification and services and procedures for personal safety of surveyors at work shall be established and documented.

5 STATUTORY CERTIFICATION AND SERVICES PROCESSES

5.1 General

It should be recognized that statutory certification and services are service delivery development processes for flag State and RO compliance verification activities rather than the design process for a ship or its equipment.

5.2 Design and development

5.2.1 The RO shall plan and control the design and development of statutory certification and services processes. During the design and development planning, the organization shall determine:

- .1 the design and development stages;
- .2 the review, verification and validation that are appropriate to each service design and development stage; and
- .3 the responsibilities and authorities for design and development.

5.2.2 The RO shall allow participation in the development and review of its rules, procedures and/or regulations, specifically in the review process prior to finalization, by representatives of the flag State and interested parties.

5.2.3 The RO shall include in its rules and/or procedures:

- .1 requirements specified and communicated to ROs by the flag State, specifically for statutory certification and services²;
- .2 requirements not stated by the flag State but necessary for specified or intended use, as determined by the RO.

5.2.4 Implementation of requirements may be in the form of adoption into the RO's internal requirements or by use of the original documents from IMO or the flag State.

5.2.5 The RO shall not issue statutory certificates to a ship, irrespective of its flag, which has been declassified or is changing class for safety reasons, before giving the opportunity to the competent Administration of the flag State to give its opinion within a reasonable time as to whether a full inspection is necessary.

5.3 Design and development inputs

5.3.1 Inputs relating to service requirements shall be determined and records maintained.

These inputs shall include:

- .1 applicable statutory and regulatory requirements;
- .2 where applicable, information derived from previous similar designs;
- .3 other requirements essential for design and development, such as functional and performance requirements; and
- .4 in-service experience with ships and mobile offshore drilling units obtained from within the RO itself and external sources.

5.3.2 The inputs shall be reviewed for adequacy. Requirements shall be complete, unambiguous and not in conflict with each other.

5.4 Design and development outputs

At suitable stages, systematic reviews of design and development of rules and standards shall be performed in accordance with planned arrangements to evaluate the ability of the results to meet requirements; and to identify any problems and propose necessary actions.

² Refer to the *Code for the implementation of mandatory IMO instruments, 2011*, adopted by resolution A.1054(27), as may be amended.

5.5 Design and development verification

Verification shall be performed in accordance with planned arrangements to ensure that the design and development outputs have met the design and development input requirements. Records of the results of the verification and any necessary actions shall be maintained.

5.6 Control of design and development changes

Design and development changes shall be identified and records maintained. The changes shall be reviewed, verified and validated, as appropriate, and approved before implementation. The review of the design and development changes shall include evaluation of the effect of the changes on the constituent parts and product already delivered. Records of the results of the review of changes and any necessary actions shall be maintained.

5.7 Control of production and service provisions

5.7.1 The RO shall ensure that all statutory certification and services are carried out under controlled conditions.

5.7.2 Controlled conditions shall include, as applicable:

- .1 the availability of information that describes the status and condition of ships surveyed and certified;
- .2 the availability of rules, regulations, work instructions, and other applicable standards, as necessary;
- .3 the use of suitable equipment;
- .4 the availability and use of monitoring and measuring equipment;
- .5 the implementation of monitoring and measurement;
- .6 the implementation of controls to ensure the accuracy of survey reports and certificates both before and after issuance; and
- .7 a safe work environment.

5.7.3 An RO shall conduct the statutory certification and services of the ship in conformity with all relevant international requirements and the requirements of this Code. When accepting a ship on behalf of the flag State that was constructed originally without a known flag State the RO shall verify that the ship complies with national requirements of that flag State prior to certification.

5.8 Property of clients

The RO shall identify, verify, protect and safeguard property provided by the clients for performance of statutory certification and services. If property is lost, damaged or otherwise found to be unsuitable for use, the RO shall report this to the property owner and maintain relevant records.

5.9 Subcontracting and service suppliers

5.9.1 Where an RO chooses to outsource any service that affects conformity to requirements or accepts work of a third party approved by the RO, the RO shall ensure that it fully controls the performance of such services. The flag State may increase the scope of control to be applied to these outsourced services. The process for outsourcing shall be defined within the RO's quality management system. For the purpose of accountability to the flag State, the work performed by the sub-contracted organization or service supplier constitutes the work of the RO and shall be subject to the requirements incumbent upon the RO under this Code.

5.9.2 Firms providing services on behalf of the owner of a ship or a mobile offshore drilling unit, the results of which are used by the RO in making decisions affecting the statutory certification and services shall be subject to approval and control by either the flag State or the RO in accordance with the procedures under their respective quality management system or the flag State requirements.

5.10 Control of monitoring and measuring devices

5.10.1 The RO shall determine the monitoring and measurement to be undertaken and the monitoring and measurement equipment needed to provide evidence of conformity to the applicable requirements.

5.10.2 The RO shall establish processes to ensure that monitoring and measurement can be carried out in a manner that is consistent with the monitoring and measurement requirements.

5.10.3 Where necessary to ensure valid results, measuring equipment shall:

- .1 be calibrated or verified, or both, at specified intervals, or prior to use, against measurement standards traceable to international or national measurement standards; where no such standards exist, the basis used for calibration or verification shall be recorded;
- .2 be adjusted or re-adjusted as necessary;
- .3 have identification in order to determine its calibration status;
- .4 be safeguarded from adjustments that would invalidate the measurement result; and
- .5 be protected from damage and deterioration during handling, maintenance, and storage.

5.10.4 The RO shall assess and record the validity of previous measuring results when the equipment is found not to conform to requirements. The RO shall take appropriate action on the equipment affected. Records of results of calibration and verification shall be maintained.

5.10.5 When used in monitoring and measurement of specific requirements, the ability of computer software to satisfy the intended application shall be confirmed. This shall be undertaken prior to initial use and reconfirmed as necessary.

5.10.6 Where an RO is verifying testing at manufacturers, builders, repairers or owners premises and reporting the same, the RO shall ensure that the measuring devices used in

the process are identified and that evidence of calibration is obtained. Where an RO is witnessing testing of service equipment installed or available on board a ship, a means shall be established so that the RO is satisfied as to the appropriate accuracy of the measuring equipment.

5.11 Complaints

The RO shall have a documented process to address complaints related to statutory certification and services.

5.12 Appeals

The RO shall have a documented process to address appeals related to statutory certification and services in accordance with the requirements of the flag State.

6 PERFORMANCE MEASUREMENT, ANALYSIS AND IMPROVEMENT

6.1 General

6.1.1 The RO shall plan and implement the monitoring, measurement, analysis and improvement processes needed to demonstrate conformity to statutory certification and services requirements, to ensure conformity of the quality management system, and to continually improve the effectiveness of the quality management system. This shall include the determination of applicable methods, including statistical techniques, and the extent of their use. The measurements employed by the RO shall be reviewed periodically, and data shall be verified on a continual basis for accuracy and completeness.

6.1.2 The RO shall develop key performance indicators with respect to the performance of statutory certification and services.

6.2 Internal audit

6.2.1 The RO shall implement an audit programme; including the completion of internal audits at planned intervals to determine whether the authorized activity conforms to the planned arrangements and that the quality management system is effectively implemented and maintained, and that a supervisory system is in place, which monitors statutory certification and services.

6.2.2 The audit programme shall take into consideration the status and importance of the processes and areas to be audited, as well as the results of previous audits, flag State feedback, complaints and appeals including port State and flag State inspections. When planning the internal audits, consideration shall be given to complaints received in the past (either related to the location or in general) and to the results of previous internal audits and to the operation of the locations.

6.2.3 The RO shall define the audit criteria, scope, frequency, and methods. Auditors shall be suitably qualified and selected in order to ensure objectivity and impartiality of the audit process. Auditors shall not audit their own work. The audit scope shall cover the processes for the statutory certification and services at various locations with a focus on verification of the efficient and effective implementation of the quality management system and applicable work processes at the individual location. The audit periods, which may be established according to the findings, shall ensure that each location is audited at least once per three years. Audits at locations shall also include visits to selected sites, which operate under the control of the location.

6.2.4 A documented procedure shall be established to define the responsibilities and requirements for planning and conducting audits, establishing records and reporting results. Records of audits and their results shall be maintained.

6.2.5 The management responsible for the area being audited shall ensure that any necessary corrections and corrective actions are taken without undue delay to eliminate detected nonconformities, observations (potential non-conformities) and their root causes.

6.3 Vertical Contract Audit

6.3.1 The RO shall carry out Vertical Contract Audits annually for each of the following processes:

- .1 plan approval;
- .2 new construction survey;
- .3 in-service periodical survey/audit; and
- .4 type approval (where applicable) or survey of other materials and equipment.

6.3.2 Evidence of completion of VCAs and findings thereof, shall be formally recorded.

6.4 Monitoring and measurement of processes

6.4.1 The RO shall apply suitable methods for monitoring, including a supervisory system that monitors the work activities carried out, and where applicable, measurement of the quality management system processes. These methods shall demonstrate the ability of the processes to achieve sustained compliance with the requirements of this Code and the agreement with the flag State, in particular that:

- .1 the RO's rules and/or regulations are complied with; and
- .2 the requirements of the statutory certification and services are satisfied.

6.4.2 When planned results are not achieved, correction and corrective action shall be taken, as appropriate.

6.4.3 The implemented methods should consider issues such as, but not limited to:

- .1 port State control detentions;
- .2 casualties; and
- .3 rework of plan approval letters and survey reports.

6.5 Control, monitoring and measurement of non-conformities, including statutory deficiencies

6.5.1 The RO shall monitor and measure the service delivery with statutory requirements and the RO's rules to verify that all requirements have been met. This shall be carried out at appropriate stages of the statutory certification and services process in accordance with the planned arrangements. Evidence of conformity with the statutory requirements and RO rules shall be maintained. Records shall indicate the person(s) approving or verifying compliance with the statutory requirements and the RO's rules.

6.5.2 The RO shall make provisions to ensure that non-conformities are identified and controlled. The controls and related responsibilities and authorities for dealing with non-conformities shall be defined in a documented procedure.

6.5.3 Where applicable, the RO shall deal with a non-conformity by one or more of the following ways:

- .1 by taking action to eliminate the detected non-conformity;
- .2 by authorizing its use, release or acceptance under the terms determined by the flag State;
- .3 when accepting with or without correction by exemption or equivalence, consideration should be given to the non-conformities with rules and regulations or statutory requirements during:
 - .1 drawing approval,
 - .2 survey of materials and equipment,
 - .3 survey during construction and installation,
 - .4 survey during service;
- .4 by taking action to preclude its original intended use or application; and
- .5 by taking action appropriate to the effects, or potential effects, of the non-conformity when a non-conformity is detected.

6.5.4 When a non-conformity is corrected, it shall be subject to reverification to demonstrate conformity to the requirements.

6.5.5 Records of the nature of non-conformities and any subsequent actions taken, including exemption or equivalences obtained, shall be maintained.

6.5.6 The RO shall comply with the instructions of the flag State detailing actions to be followed in the event that a ship is found not fit to proceed to sea without danger to the ship or persons on board, or presenting unreasonable threat of harm to the marine environment.

6.5.7 The ROs shall cooperate with port State control Administrations where a ship to which the RO issued the certificates is concerned, in particular, in order to facilitate the rectification of reported deficiencies or other discrepancies.

6.5.8 The RO responsible for issuing the relevant certificate shall, upon receiving a report of an accident or discovering a defect to a ship which affects the safety of the ship or the efficiency or completeness of its life saving appliances or other equipment, cause investigations to be initiated to determine whether a survey is necessary.

6.6 Improvement

6.6.1 General

The RO shall continually improve the effectiveness of its quality management system through the use of the quality policy, quality objectives, audit results, analysis of data, corrective and preventive actions and management review.

6.6.2 Data analysis

6.6.2.1 The objective of data analysis is to determine the cause of problems to guide effective corrective and preventive action. The RO shall:

- .1 analyse data from various sources to assess performance against plans and goals and to identify areas for improvement;
- .2 make use of statistical methodologies for data analysis, which can help in assessing, controlling, and improving performance of processes; and
- .3 analyse the product requirements, as well as analysis of relevant processes, operations and quality records.

6.6.2.2 Information and data from all parts of the RO shall be integrated and analysed to evaluate the overall performance of the quality management system.

6.6.2.3 The results of analysis shall be documented and used to determine:

- .1 trends;
- .2 operational performance;
- .3 customer satisfaction and/or dissatisfaction through complaints or other quality indicators (PSC detentions, flag State non-conformities, etc.);
- .4 effectiveness and/or efficiency of processes; and
- .5 performance of suppliers.

6.6.3 Sources of information

The RO shall identify sources of information and establish processes for collection of information for planning continual improvement, corrective and preventive actions. Such information shall include, inter alia:

- .1 customer complaints;
- .2 non-conformance reports;
- .3 outputs from management reviews;
- .4 internal audit reports;
- .5 outputs from data analysis;
- .6 relevant records;
- .7 outputs from customer feedback and satisfaction measurements;
- .8 process measurements;
- .9 results of self-assessment; and
- .10 in-service experience.

6.6.4 Corrective action

6.6.4.1 The RO shall without undue delay take action to eliminate the causes of non-conformities in order to prevent recurrence. Corrective actions shall be appropriate to the effects of the non-conformities encountered and address all actual or potential effects of these.

6.6.4.2 A documented procedure shall be established to define requirements for:

- .1 reviewing non-conformities (including complaints);
- .2 determining the cause of non-conformities;
- .3 evaluating the need for action to ensure that non-conformities do not recur;
- .4 determining and implementing action needed;
- .5 records of the results of action taken; and
- .6 reviewing the effectiveness of the corrective action taken.

6.6.5 Preventive action

6.6.5.1 The RO shall take action to identify and eliminate the causes of potential non-conformities in order to prevent their occurrence. Preventive actions shall be appropriate to the nature and effects of the potential problems.

6.6.5.2 A documented procedure shall be established to define requirements for:

- .1 determining potential non-conformities and their causes;
- .2 evaluating the need for action to prevent occurrence of non-conformities;
- .3 determining and implementing action needed;
- .4 records of results of action taken; and
- .5 reviewing the effectiveness of the preventive action taken.

6.6.5.3 Examples of such methodologies may include risk analyses, trend analyses, statistical process control, fault-tree analyses, failure modes and effects and criticality analyses.

7 QUALITY MANAGEMENT SYSTEM CERTIFICATION

7.1 The RO shall develop, implement and maintain an effective internal quality management system that complies with the requirements of this Code and is based on appropriate parts of internationally recognized quality standards no less effective than the ISO 9000 series.

7.2 The RO's quality management system shall be periodically assessed and certified in accordance with the applicable international quality standards by a qualified body, accredited to comply with ISO/IEC 17021:2006 standard by an accreditation body that is signatory to the International Accreditation Forum (IAF) Multinational Recognition Agreement (MRA), recognized by the flag State as having the necessary governance and competences to act independently of the ROs or their associations and having the necessary means to carry out

its duties effectively and to the highest professional standards, safeguarding the independence of the persons performing them.

7.3 In pursuance of continually improving RO and flag State services, IMO endeavours to closely monitor the certification and audit process of the RO and its implementation to ensure its continued relevance and validity to the maritime industry in general and to the ROs, in particular. IMO will establish the working methods and rules of procedure for such monitoring.

8 AUTHORIZATION OF RECOGNIZED ORGANIZATIONS

8.1 General

Under the provisions of regulation I/6 of SOLAS 1974, article 13 of LL 66, regulation 6 of MARPOL Annex I and regulation 8 of MARPOL Annex II and article 6 of TONNAGE 69, a flag State may authorize an RO to act on its behalf in statutory certification and services and determination of tonnages only to ships entitled to fly its flag as required by these conventions. Such authorizations shall not require ROs to perform actions that impinge on the rights of another flag State.

8.2 Legal basis of the functions under authorization

The flag State shall establish the legal basis under which the authorization of statutory certification and services is administered. The following items shall be considered:

- .1 the formal written agreement with the RO;
- .2 acts, regulations and supplementary information;
- .3 interpretations; and
- .4 deviations and equivalent solutions.

8.3 Specification of authorization

The flag State shall specify the scope of authorization granted to an RO. The following specifications shall be considered:

- .1 ship types and sizes;
- .2 conventions and other instruments, including relevant national legislation;
- .3 approval of drawings;
- .4 approval of materials and equipment;
- .5 surveys, audits, inspections;
- .6 issuance, endorsement and/or renewal of certificates;
- .7 corrective actions;
- .8 withdrawal or cancellation of certificates; and
- .9 reporting requirements.

8.4 Resources

The flag State shall ensure that an RO has adequate resources in terms of technical, managerial and research capabilities to accomplish the tasks being assigned, in accordance with the minimum standards for ROs acting on behalf of the flag State set out in part 2 of this Code.

8.5 Instruments

The flag State shall provide the RO with access to all appropriate instruments of national law giving effect to the provisions of the conventions, notify the RO of any additions, deletions or revisions thereto in advance of their effective date and specify whether the flag State's standards go beyond convention requirements in any respect.

8.6 Instructions

8.6.1 The flag State shall issue specific instructions detailing the procedures to be followed in carrying out statutory certification and services, and actions to be followed in the event that a ship is found not fit to proceed to sea without danger to the ship or persons on board, or presenting unreasonable threat of harm to the marine environment.

8.6.2 Flag States shall ensure by appropriate means that ROs cooperate with each other in accordance with the provisions of this Code.

8.7 Records

The flag State shall specify that the RO maintain records, which can provide the flag State with data to assist in interpretation of convention regulations.

PART 3

OVERSIGHT OF RECOGNIZED ORGANIZATIONS

1 PURPOSE

Part 3 of the RO Code provides guidance on flag State's oversight of ROs authorized to perform statutory certification and services on its behalf. Part 3 also provides guidance on the principles of oversight that may include ship inspection, auditing, and monitoring activities.

2 SCOPE

Part 3 of the RO code is applicable to all flag States that have authorized ROs to perform statutory certification and services. Part 3 includes flag State oversight provisions and provides guidance, which is non-mandatory, to assist flag States in the development and implementation of an effective oversight programme of ROs.

3 REFERENCES

The following documents are referenced:

- .1 mandatory IMO instruments;
- .2 ISO 9000:2005, Quality Management Systems – Fundamentals and vocabulary;

- .3 ISO 9001:2008, Quality Management Systems – Requirements;
- .4 ISO/IEC 17020:1998, General Criteria for the operation of various types of bodies performing inspection;
- .5 ISO 19011:2002, Guidelines for quality and/or environmental management systems auditing; and
- .6 national legislation.

4 TERMS AND DEFINITIONS

4.1 *Audit* means a systematic, independent, and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which the audit criteria are fulfilled. Auditing is characterized by reliance on a number of principles. These make the audit an effective and reliable tool in support of management policies and controls, providing information on which an RO can act to improve its performance. Adherence to these principles is a prerequisite for providing audit conclusions that are relevant and sufficient and for enabling auditors working independently from one another to reach similar conclusions in similar circumstances.

4.2 *Audit criteria* means a set of policies, procedures or requirements.

4.3 *Audit evidence* means records, statements of fact, or other information, which are relevant to the audit criteria and verifiable. Audit evidence may be qualitative or quantitative.

4.4 *Audit findings* means results of the evaluation of the collected audit evidence against audit criteria. Audit findings can indicate conformity, observation (potential non-conformity) or non-conformity with audit criteria or opportunities for improvement.

4.5 *Audit conclusion* means an outcome of an audit, provided by the audit team, after consideration of the audit objectives and all audit findings.

4.6 *Audit client* means an organization or person requesting an audit.

4.7 *Auditee* is an organization recognized by a flag State that may be subject to an audit by the authorizing flag State.

4.8 *Auditor* means a person with the competence to conduct an audit.

4.9 *Audit team* means one or more auditors conducting an audit, supported if required by technical experts.

4.10 *Technical expert* means a person who provides specific knowledge or expertise to the audit team.

4.11 *Audit programme* means a set of one or more audits planned for a specific period and directed towards a specific purpose. An audit programme includes all activities necessary for planning, organizing, and conducting the audits.

4.12 *Audit plan* means a description of the activities and arrangements for an audit.

4.13 *Audit scope* means extent and boundaries of an audit. The audit scope generally includes a description of the physical locations, organizational units, activities and processes, as well as the time period covered.

4.14 *Competence* means demonstrated personal attributes and demonstrated ability to apply knowledge and skills.

4.15 *Oversight* means any activity by a flag State carried out to assure an RO's service complies with IMO and national requirements of the recognizing flag State.

4.16 *Monitoring* means any activity by a flag State where a flag State witnesses services by an RO or reviews documentation used by the RO and which is carried out to assure that RO services are in compliance with IMO and national requirements. Monitoring may be considered as a component of oversight.

5 ESTABLISHING AN OVERSIGHT PROGRAMME

5.1 Oversight

The flag State should establish or participate in an oversight programme with adequate resources for monitoring of, and communication with, its RO(s) in order to ensure that its international obligations are fully met, by:

- .1 exercising its authority to conduct supplementary surveys to ensure that ships entitled to fly its flag in fact comply with the requirements of the applicable international instruments;
- .2 conducting supplementary surveys as it deems necessary to ensure that ships entitled to fly its flag comply with national requirements, which supplement the international mandatory requirements; and
- .3 providing staff who have a good knowledge of the rules and regulations of the flag State and the ROs and who are available to carry out effective oversight of the ROs.

5.2 Flag State's supervision of duties delegated to an RO

The flag State's supervision of duties delegated to an RO should consider, inter alia, the following:

- .1 documentation of the RO's quality management system;
- .2 access to internal instructions, circulars and guidelines;
- .3 access to the RO's documentation relevant to the flag State's fleet;
- .4 cooperation with the flag State's inspection and verification work; and
- .5 provision of information and statistics; such as, but not limited to, damage and casualties relevant to the flag State's fleet.

5.3 Verification and monitoring

The flag State should establish a system to ensure the adequacy of statutory certification and services provided. Such a system should, inter alia, include the following items:

- .1 procedures for communication with the RO;
- .2 procedures for reporting to the flag State by the RO and the processing of such reports by the flag State. The following reporting requirements should be considered:
 - .1 the RO should notify the flag State immediately upon becoming aware of a situation involving a major deficiency, or serious safety-related issue, that would normally be considered sufficient to detain a ship from proceeding to sea pending correction;
 - .2 the RO should notify the flag State(s) immediately upon becoming aware of a situation aboard ship or within a company involving a major non-conformity, as defined in the *Guidelines on the Implementation of the International Safety Management (ISM) Code by Administrations* (resolution A.1022(26), as amended);
 - .3 the notification above should contain the name of the company or ship, the IMO number, the official number, if applicable, and a description of the major non-conformity, deficiency or issue;
 - .4 the RO should inform the flag State, as soon as possible, of any dangerous occurrences, accidents, machinery or structural breakdowns, or failures that they are aware of on a ship; and
 - .5 the RO should report to the flag State in writing the names and official numbers, if applicable, of any ships removed from the RO's list of classed/certified ships for which the RO has performed statutory certification and services. The report should contain a description of the reason(s) for removal from class, and this should be made within thirty (30) days of the removal becoming effective;
- .3 additional ship's inspections by the flag State;
- .4 appropriate technical and/or safety related consultations between ROs regarding statutory certification and services, which may affect the validity of certificates issued either in whole or in part on behalf of the flag State(s);
- .5 the flag State's evaluation/acceptance of the certification of the RO's quality management system by an independent body of auditors accepted by the flag State;
- .6 monitoring and verification of statutory certification and services, which contribute either in whole or in part to compliance with a mandatory IMO instrument. The flag State should consider the implementation of the following:

- .1 flag State's oversight of RO quality management systems;
- .2 observation of or systematic review of reports of the quality management system audits conducted by other qualified persons or organizations external to and independent of the RO;
- .3 verification and inspection of ships that are subject to statutory certification and services; and
- .4 complaint and feedback system and corrective action follow-up;
- .7 a flag State accepting ships constructed without its involvement should establish that an RO conducting statutory certification and services of the ship conforms to this Code; and
- .8 for ships constructed without an identified flag State, the flag State specific requirements should be verified prior to certification.

6 PRINCIPLES OF AUDITING

6.1 The flag State should be satisfied that the RO has an effective quality management system in place. The flag State may rely upon the audits carried out by an accredited certification body or equivalent organizations. Intergovernmental cooperation in establishing common auditing practices is encouraged.

6.2 A flag State auditor should advance the following principles:

- .1 ethical conduct: the foundation of professionalism. Trust, integrity, confidentiality and discretion are essential to auditing;
- .2 fair presentation: the obligation to report truthfully and accurately. Audit findings, audit conclusions, and audit reports reflect truthfully and accurately the audit activities. Significant obstacles encountered during the audit and unresolved diverging opinions between the audit team and the auditee are reported; and
- .3 due professional care: the application of diligence and judgment in auditing. Auditors exercise care in accordance with the importance of the task they perform and the confidence placed in them by audit clients and other interested parties. Having the necessary competence is an important factor.

6.3 Further principles relate to the audit, which is by definition independent and systematic.

- .1 independence: the basis for the impartiality of the audit and objectivity of the audit conclusions. Auditors are independent of the activity being audited and are free from bias and conflict of interest. Auditors maintain an objective state of mind throughout the audit process to ensure that the audit findings and conclusions will be based only on the audit evidence;
- .2 evidence-based approach: the rational method for reaching reliable and reproducible audit conclusions in a systematic audit process. Audit evidence is verifiable. It is based on samples of the information available, since an audit is conducted during a finite period of time and with finite resources. The appropriate use of sampling is closely related to the confidence that can be placed in the audit conclusions.

6.4 The guidance given in this Code is based on the principles set out above.

7 MANAGING AN OVERSIGHT PROGRAMME

7.1 General

7.1.1 The flag States are required to verify that the organizations recognized to perform statutory certification and services on their behalf fulfil the requirements of this Code. The purpose of this verification is to ensure that the RO is performing its statutory certification and service in compliance with this Code and its agreement with the flag State.

7.1.2 The flag State should develop, implement, and manage an effective oversight programme of the ROs that act on its behalf.

7.1.3 An oversight programme should include various monitoring activities, which may inter alia consist of audits, inspections and audit observations (potential non-conformities). The flag States' oversight programme of their ROs should be developed after carefully assessing the factors associated with the RO as well as the extent of access to the RO's records of statutory certification and services that are made available to the flag State. The programme should also consider the delivery of statutory certification and services with respect to the provisions of the Conventions and with respect to the national requirements and instructions published by the flag State. Factors should include:

- .1 the scope and frequency of high level audits of the RO carried out by flag States and independent accredited bodies, and of internal audits carried out by the RO;
- .2 the extent to which audit findings, observations (potential non-conformities) and corrective actions are made available to the flag State;
- .3 the extent to which remote monitoring of the RO can be undertaken by the flag State which can manifest itself in several different ways depending on the scope of information that is electronically available to the flag State. Remote monitoring can include:
 - .1 review of the contents of survey reports associated with statutory certificates issued by the RO;
 - .2 review of the effectiveness of the control and rectification of deficiencies and outstanding requirements within the deadlines established by the flag State through the RO; and
 - .3 review of the RO's country-specific instructions to determine that the flag State's national requirements are properly and completely addressed by the RO;
- .4 flag State inspections carried out on board ships to check the end-result of the certification process, with a specific interest in their national requirements and/or implementation of instructions issued to the RO; and
- .5 port State control detentions and deficiencies allocated to the responsibility of the RO.

7.1.4 An oversight programme should also include all activities necessary for planning and organizing the types and number of monitoring activities, and for providing resources to conduct them effectively and efficiently within the specified periods.

7.1.5 Those assigned the responsibility for managing the oversight programme should:

- .1 establish, implement, monitor, review and improve the oversight programme; and
- .2 identify the necessary resources and ensure they are available and provided, as required.

7.1.6 An oversight programme should also include planning, the provision of resources and the establishment of procedures to conduct monitoring activities within the programme.

7.2 Oversight programme objectives and extent

7.2.1 Objectives of an oversight programme

7.2.1.1 The flag State should establish objectives for an oversight programme, to direct the planning and conduct of monitoring activities.

7.2.1.2 The following objectives should be considered:

- .1 management priorities;
- .2 flag State intentions;
- .3 flag State system requirements;
- .4 statutory, regulatory and contractual requirements;
- .5 need for ROs to be evaluated;
- .6 flag State, ROs, and other requirements;
- .7 needs of other interested parties; and
- .8 risks to the flag State.

7.2.2 Extent of an oversight programme

7.2.2.1 The flag State's oversight programme should reflect the size, nature and complexity of the flag State's authorization programme, as well as the following factors:

- .1 the scope, objective and duration of monitoring activities to be conducted;
- .2 the frequency of monitoring activities to be conducted;
- .3 the number, importance, complexity, similarity, and locations of the ROs;
- .4 standards, statutory, regulatory, and contractual requirements and other monitoring criteria;
- .5 the need for accreditation or registration/certification of ROs;
- .6 conclusions of previous monitoring activities;
- .7 the concerns of interested parties; and
- .8 significant changes to an RO or its operations.

7.2.2.2 A flag State may enter into a written agreement to participate in combined monitoring/oversight activities with another flag State or States that have authorizations with the same RO provided that the level of detail regarding individual flag State requirements and individual flag State performance are addressed at a level equivalent to an oversight programme conducted by each of the individual flag State. Conversely no flag State may be compelled by another flag State or organization to accept oversight of an RO by others in lieu of conducting its own individual flag State oversight unless it so elects by written agreement or is so provided in the law of that State. A copy of all such agreements should be submitted to IMO for the information of the Member States.

7.3 Oversight programme responsibilities, resources and procedures

7.3.1 Oversight programme responsibilities

7.3.1.1 The flag State is responsible for managing its oversight programme. The flag State should utilize competent individuals that have an understanding of the oversight requirements, audit principles, and the application of audit techniques. They should have management skills as well as technical and business understanding relevant to the activities to be monitored.

7.3.1.2 Those assigned the responsibility for managing the oversight programme should:

- .1 establish the objectives and extent of the oversight programme;
- .2 establish the responsibilities and procedures, and ensure resources are provided;
- .3 ensure the implementation of the oversight programme;
- .4 ensure that appropriate oversight programme records are maintained; and
- .5 monitor, review and improve the oversight programme.

7.3.2 Oversight programme resources

When identifying resources for the oversight programme, the flag State should consider the following:

- .1 financial resources necessary to develop, implement, manage, and improve oversight activities;
- .2 auditing techniques;
- .3 processes to achieve and maintain the competence of staff, and to improve oversight performance;
- .4 the availability of staff and technical experts having competence appropriate to the particular oversight programme objectives;
- .5 the extent of the oversight programme; and
- .6 travelling time, accommodation and other oversight needs.

7.3.3 Oversight programme procedures

7.3.3.1 The flag State's oversight programme procedures should address the following:

- .1 planning and scheduling of oversight activities;
- .2 assuring the competence of assigned personnel;
- .3 selecting appropriate personnel and assigning their roles and responsibilities;
- .4 conducting monitoring activities;
- .5 conducting follow-up, if applicable;
- .6 maintaining oversight programme records;
- .7 monitoring the performance and effectiveness of the oversight programme;
and
- .8 reporting on the overall achievements of the oversight programme.

7.3.3.2 For flag States with a limited authorization programme, the activities above may be addressed in a single procedure.

7.3.4 Oversight programme implementation

The implementation of a flag State oversight programme should include the following factors:

- .1 communicating the objectives of the oversight programme to relevant parties;
- .2 coordinating and scheduling monitoring activities relevant to the oversight programme;
- .3 establishing and maintaining a process for the evaluation of assigned personnel and their continual professional development;
- .4 selecting and appointing assigned personnel;
- .5 providing necessary resources to the oversight programme, specifically the corresponding monitoring activities;
- .6 robust execution of monitoring activities according to the oversight programme;
- .7 ensuring the control of records of the monitoring activities;
- .8 ensuring review and approval of monitoring activity reports, and ensuring their distribution to interested parties; and
- .9 ensuring follow-up, if applicable.

7.3.5 Oversight programme records

7.3.5.1 The flag State's monitoring records should be maintained to demonstrate the implementation of the oversight programme and should include the following:

- .1 all records related to monitoring activities, such as:
 - .1 plans;
 - .2 reports;
 - .3 non-conformity reports;
 - .4 corrective and preventive action reports, and
 - .5 follow-up reports, if applicable;
- .2 results of oversight programme review; and
- .3 records related to personnel covering subjects, such as:
 - .1 assigned personnel competence and performance evaluation;
 - .2 monitoring and/or audit team selection; and
 - .3 maintenance and improvement of competence.

7.3.5.2 Records should be retained and suitably safeguarded.

7.4 Oversight programme monitoring and reviewing

7.4.1 The implementation of a flag State oversight programme should be monitored and, at appropriate intervals, reviewed to assess whether its objectives have been met and to identify opportunities for improvement.

7.4.2 The flag State should develop and use performance indicators to monitor the effectiveness of its oversight programme for ROs. The following factors should be considered:

- .1 the ability of assigned personnel to implement the oversight plan;
- .2 conformity with the requirements of the RO Code, monitoring activities, and schedules; and
- .3 feedback from clients, ROs and assigned personnel.

7.4.3 The flag State should consider the following performance indicators when evaluating the performance of the ROs:

- .1 port State performance of ROs;
- .2 results of RO's internal audits;
- .3 results of quality management system audits performed by third-party organizations (ACBs);

- .4 the results of previous performance monitoring; and
- .5 condition/compliance of ships that receive survey and certification from the ROs.

7.4.4 The flag State should, on a periodic basis, evaluate its overall performance with respect to the implementation of administrative processes, procedures and resources necessary to meet its obligations as required by the conventions to which it is party.

7.4.5 Other measures to evaluate the performance of the flag States may include, inter alia, the following:

- .1 port State control detention rates;
- .2 flag State inspection results;
- .3 casualty statistics;
- .4 communication and information processes;
- .5 annual loss statistics (excluding constructive total losses (CTLs)); and
- .6 other performance indicators as may be appropriate, to determine whether staffing, resources and administrative procedures are adequate to meet their flag State obligations. Other performance measurement indicators may consist of the following:
 - .1 fleet loss and accident ratios to identify trends over selected time periods;
 - .2 the number of verified cases of detained ships in relation to the size of the fleet;
 - .3 the number of verified cases of incompetence or wrongdoing by individuals holding certificates or endorsements issued under its authority;
 - .4 responses to port State deficiency reports or interventions;
 - .5 investigations into very serious and serious casualties and lessons learned from them;
 - .6 technical and other resources committed;
 - .7 results of inspections, surveys and controls of the ships in the fleet;
 - .8 investigation of occupational accidents;
 - .9 the number of incidents and violations under MARPOL, as amended; and
 - .10 the number of suspensions or withdrawals of certificates, endorsements and approvals.

7.4.6 The oversight programme review should also consider:

- .1 results and trends from monitoring;
- .2 conformity with procedures;
- .3 evolving needs and expectations of interested parties;
- .4 oversight programme records;
- .5 alternative or new auditing practices or monitoring activities; and
- .6 consistency in performance between audit teams in similar situations.

7.4.7 Results of oversight programme reviews can lead to corrective and preventive actions and the improvement of the oversight programme.

* * *

Appendix 1

REQUIREMENTS FOR TRAINING AND QUALIFICATION OF RECOGNIZED ORGANIZATION'S TECHNICAL STAFF

A1.1 Definitions

A1.1.1 *Survey staff* are the personnel authorized to carry out surveys and to conclude whether or not compliance has been achieved.

A1.1.2 *Plan approval staff* are the personnel authorized to carry out design assessment and to conclude whether or not compliance has been achieved.

A1.1.3 *Audit staff* are the personnel authorized to carry out audits and to conclude whether compliance has been achieved.

A1.1.4 *Trainee* is a person receiving theoretical and practical training under the supervision of a trainer/tutor.

A1.1.5 *Trainer* is a designated person having experience within a relevant area or a proficient expert in a special field recognized by the RO to give theoretical training through classroom teaching, special seminars or individual training.

A1.1.6 *Tutor* is a qualified and designated person from among the RO's staff having appropriate experience and capability in the relevant areas of activities in which they assist, consult and supervise the practical training of a trainee until the latter is qualified.

A1.1.7 *Technical staff* are the personnel qualified to carry out technical activity as survey staff or plan approval staff or, Marine Management Systems audit staff.

A1.1.8 *Support staff* are the personnel assisting survey and/or plan approval staff in connection with classification and statutory work.

A1.2 Trainee entry requirements

RO personnel performing, and responsible for, statutory work shall have as a minimum the formal education requirements defined in part 2, section 4.2.5.

A1.3 Modules

A1.3.1 The RO shall define the required competence criteria for each relevant type of survey, and type of plan approval activity and audit to be performed.

A1.3.2 The RO shall define the necessary theoretical and practical training modules required to meet the competence criteria defined for survey, plan approval and marine management systems audit staff. The training modules shall cover as a minimum:

- .1 learning and competence objectives;
- .2 scope of training; and
- .3 evaluation criteria and pass requirements.

A1.3.3 Through studying the training modules, trainees shall acquire and develop general knowledge and understanding applicable to different types of ships and types of work according to the flag State requirements, RO's rules and regulations and international conventions and codes.

A1.4 Theoretical training for survey and plan approval staff

A1.4.1 The objective of theoretical training is to ensure that familiarization with rules, technical standards or statutory regulations and any additional requirement specific to the type of survey or ships is sufficient for the areas of activity.

A1.4.2 Theoretical training shall include:

- .1 general modules for theoretical training; and
- .2 special modules for theoretical training in the particular specialty.

A1.4.3 General modules for theoretical training shall include general subjects with respect to:

- .1 activity and functions of IMO and maritime Administrations;
- .2 activity and functions of classification societies;
- .3 classification of ships and mobile offshore drilling units;
- .4 types of certificates and reports issued on completion of class and statutory surveys;
- .5 quality management system;
- .6 personal safety regulations; and
- .7 legal and ethical issues.

A1.4.4 The programmes of theoretical training for survey and plan approval staff shall be documented in a training plan and developed according to the areas of activity (types or categories of surveys, types of ships, subjects such as hull, machinery, electrical engineering, etc.).

A1.4.5 In case of an existing gap in the formal educational background in some particular field of activity, theoretical training shall be extended.

A1.4.6 In case survey or plan approval staff have obtained particular qualifications through their previous work experience prior to their joining the RO, the training plan may be reduced.

A1.4.7 Additions or reductions in the individual training plans shall be documented.

A1.4.8 In case of extension of areas of activity the training plan shall be developed and documented accordingly.

A1.4.9 Theoretical training may be received through classroom teaching, special seminars, individual training, self-study or computer-assisted training.

A1.5 Practical training for survey and plan approval staff (see appendix 2 for specific criteria for each certificate)

A1.5.1 General

Practical training shall ensure the trainee is sufficiently proficient to carry out survey or design assessment work independently.

A1.5.2 Plan approval staff

A1.5.2.1 Practical training shall be commensurate with the complexity of design assessment (review of technical design of ships, review of technical documentation on materials and equipment) and shall be carried out under the supervision of a tutor.

A1.5.2.2 Practical training carried out shall be recorded.

A1.5.3 Survey staff

A1.5.3.1 Practical training shall be commensurate with the complexity of the survey (types or categories of surveys, types of ships, specific subjects (hull, machinery, and electrical engineering)) and shall be carried out under the supervision of a tutor.

A1.5.3.2 Selection of particular surveys depends on the specialty/qualification to be granted and shall include classification and statutory types of surveys of the following, as appropriate:

- .1 new construction;
- .2 ships and mobile offshore drilling units in operation; and
- .3 materials and equipment.

A1.5.3.3 Practical training carried out shall be recorded.

A1.5.4 Examinations and tests for survey and plan approval staff

A1.5.4.1 Competence gained through the theoretical training shall be demonstrated through written or oral examination or through suitable computer tests.

A1.5.4.2 Examinations and tests shall cover the sets of modules attended by the trainee, as applicable.

A1.5.4.3 With respect to competence gained through practical training being demonstrated by:

- .1 a surveyor, this shall be accomplished by the surveyor satisfactorily completing the surveys associated with the competence whilst under the supervision of the tutor. The surveyor would be expected to be able to answer associated technical questions raised as thought necessary by the tutor to confirm levels of understanding. The results of the tutor's review shall be annotated on the respective training record; and

- .2 a plan approval staff member, this shall be accomplished by the staff member satisfactorily completing the appraisal of drawings against the relevant classification rules and statutory regulations as verified through a review by the tutor of the staff member's work. The results of the tutor's review shall be annotated on the respective training record.

A1.5.4.4 A competent person shall perform examinations of theoretical training or witnessing practical competence.

A1.5.4.5 During examinations and tests, use of the relevant working documents (rules, conventions, checklists, etc.) by the trainee shall be considered allowable.

A1.5.5 Audit staff

A1.5.5.1 Theoretical training

A1.5.5.1.1 Theoretical training should address the following:

- .1 principles and practice of management systems auditing;
- .2 the requirements of the International Safety Management (ISM) Code and its interpretation and application;
- .3 mandatory rules and regulations and applicable codes, guidelines and standards recommended by the IMO, flag States, classification societies and maritime industry organization; and
- .4 basic shipboard operations including emergency preparedness and response. The time spent on each topic and the level of detail that it is necessary to include will depend on the qualifications and experience of the trainees, their existing competence in each subject, and the number of training audits to be carried out.

A1.5.5.1.2 The training may be modular in structure, in which case the period over which the theoretical training is delivered shall not exceed 12 months.

A1.5.5.1.3 Where appropriate, some elements may be delivered by means such as distance learning and e-learning. However, at least fifty per cent of the total theoretical training days shall be classroom-based in order to allow for discussion and debate and to allow candidates to benefit from the experience of the trainer.

A1.5.5.2 Examination

A1.5.5.2.1 Confirmation that the learning objectives have been met shall be demonstrated by written examination at the end of the theoretical training, or at the end of each module if the training is not delivered in a single training course.

A1.5.5.2.2 If the trainee fails the written examination, or any part thereof; a single resist will be permitted. A candidate who fails the resist will be required to undergo the corresponding theoretical training again before being allowed to make another attempt at the examination.

A1.5.5.2.3 A candidate who passes a written examination shall receive a certificate, statement or other record indicating which of the competences have been addressed, and the dates on which the corresponding training took place.

A1.5.5.3 Practical training

A1.5.5.3.1 A person authorized to carry out ISM audits shall have completed at least the minimum number of training audits under supervision as specified by the RO.

A1.5.5.3.2 The RO shall establish procedures for ensuring and demonstrating that the required competence has been achieved.

A1.6 Qualification

A1.6.1 After completion of the theoretical and practical training, with positive results, the trainee is granted the appropriate authorizations to work independently. The activities they are qualified to perform (types of surveys, types of ships, types of design approval, etc.) are identified.

A1.6.2 The criteria adopted by the RO for granting qualifications shall be documented in the appropriate quality management system documents.

A1.7 Assessment of training effectiveness

A1.7.1 The methods of training effectiveness assessment may include monitoring, testing, etc., on the regular basis according to the RO's system.

A1.7.2 The criteria adopted by the RO for training effectiveness assessment shall be documented in the appropriate RO quality management system documents.

A1.7.3 Evidence of training effectiveness assessment shall be provided.

A1.8 Maintenance of qualification

A1.8.1 The criteria adopted by the RO for maintenance or updating of qualifications shall be in accordance with and documented in the appropriate RO quality management system documents.

A1.8.2 Updating of qualifications may be done through the following methods:

- .1 self-study (unassisted study);
- .2 different courses and seminars organized in local offices and/or in the main offices of the RO;
- .3 extraordinary technical seminars in case of significant changes in the RO's rules or international conventions, codes, etc. (with examination if required); and
- .4 special training on specific works or type of survey in some areas of the activity, which are determined by activity monitoring or by a long time absence of practical experience.

A1.8.3 Maintenance of qualifications in accordance with these criteria shall be verified at annual performance review.

A1.9 Activity monitoring

A1.9.1 Purpose

Activity monitoring has the purpose:

- .1 to assess whether the individuals are competent and capable of carrying out their authorized and assigned work independently, consistent with the RO's policies and practices;
- .2 to identify needs for continual improvement in aligning the technical services across the organization; and
- .3 to identify need for improvements in the guidance processes and/or tools provided for the staff.

A1.9.2 Monitoring

A1.9.2.1 Headquarters, regional or local offices, may initiate activity monitoring. It shall be carried out by persons who are qualified in the survey or audit being monitored.

A1.9.2.2 It shall be carried out to the extent that the work of each surveyor or auditor engaged in survey or audit work will be monitored at least once every other calendar year. Where a person carries out both survey and audit work, they shall be monitored in both work activities at least once every other calendar year. Only one type of survey for a qualified surveyor and one type of audit for a qualified auditor need be monitored within the two-year cycle. Persons doing plan approval shall be monitored at least once every other calendar year.

A1.9.2.3 Subsequent to the monitoring, the monitoring surveyor or auditor shall report the activity.

A1.9.2.4 Should any comments be necessary, or findings made, these will be included in the report, for review and corrective action.

A1.9.3 Method

A1.9.3.1 Activity monitoring shall be performed by personnel authorized to undertake activity monitoring.

A1.9.3.2 Preparation shall include familiarization with the processes, requirements and tools (e.g. software) associated with the activity to be witnessed during the activity monitoring.

A1.9.3.3 The monitoring process shall include a review of relevant performance information related to the individual's work. This may include: report and certificate accuracy, meeting objectives, received complaints, PSC detention feedback.

A1.9.3.4 Survey, audit or plan approval activity selected for monitoring shall have an extent such as to cover a maximum possible range of activity and qualifications that can be monitored during the attendance.

A1.9.3.5 Monitoring shall include, but not be limited to, evaluation of the individual's:

- .1 personal safety awareness;
- .2 understanding and application of the relevant requirements;
- .3 technical capabilities;
- .4 understanding of the related requirements; and
- .5 standards of reporting and communication.

A1.9.4 Reporting

Subsequent to the monitoring, a report shall be made with conclusions with respect to:

- .1 whether the individuals assessed are capable of carrying out their authorized and assigned work (including particularly positive aspects);
- .2 any areas of improvement; and
- .3 any recommended training requirements.

A1.9.5 Evaluation

The monitoring report shall be evaluated by management who will determine the individual's continued authorization or possible training requirements to obtain further authorization. The report shall be completed and reviewed annually.

A1.9.6 Implementation

The RO shall:

- .1 document the activity monitoring methodology, including how it is reported;
- .2 document how the authorization to undertake activity monitoring is achieved;
- .3 document consequence and actions to undertake if activity-monitoring timing is exceeded;
- .4 maintain records to demonstrate that all relevant staff has been monitored in the prescribed period; and
- .5 maintain records to demonstrate level of technical performance and the effect of possible improvement activities across the organization through the analysis of activity monitoring.

A1.10 Training of support staff

Support staff shall have training and/or supervision commensurate with the tasks they are authorized to perform.

A1.11 Records

Records shall be maintained for each surveyor/plan approval staff member, indicating:

- .1 formal education background;
- .2 professional experience prior to joining the RO;
- .3 evidence of theoretical training completed;
- .4 evidence of practical training completed;
- .5 evidence of examinations and tests;
- .6 professional experience during employment at the RO; and
- .7 periodical updating of knowledge.

* * *

Appendix 2

SPECIFICATIONS ON THE SURVEY AND CERTIFICATION FUNCTIONS OF RECOGNIZED ORGANIZATIONS ACTING ON BEHALF OF THE FLAG STATE

A2.1 SCOPE

A2.1.1 This document contains minimum specifications for organizations recognized as capable of performing statutory work on behalf of a flag State in terms of certification and survey functions connected with the issuance of international certificates.

A2.1.2 The principle of the system described below is to divide the specifications required into different elementary modules with a view to selecting the relevant modules for each function of certification and survey.

A2.2 AREAS OF INTEREST COVERED BY ELEMENTARY MODULES

- .1 Management
- .2 Technical appraisal
- .3 Surveys
- .4 Qualifications and training.

A2.2.1 Management

Module 1A: Management functions

The management of the RO shall have the competence, capability and capacity to organize, manage and control the performance of survey and certification functions in order to verify compliance with requirements relevant to the tasks delegated and shall, inter alia:

- .1 possess an adequate number of competent supervisory, technical appraisal and survey personnel;
- .2 provide for the development and maintenance of appropriate procedures and instructions;
- .3 provide for the maintenance of up-to-date documentation on interpretation of the relevant instruments;
- .4 give technical and administrative support to field staff; and
- .5 provide for the review of survey reports and provision of experience feedback.

A2.2.2 Technical appraisal

Module 2A: Hull structure

The RO shall have the appropriate competence, capability and capacity to perform the following technical evaluations and/or calculations pertaining to:

- .1 longitudinal strength;
- .2 local scantlings such as plates and stiffeners;
- .3 structural stress, fatigue and buckling analyses; and
- .4 materials, welding and other pertinent methods of material-joining, for compliance with relevant rules and convention requirements pertaining to design, construction and safety.

Module 2B: Machinery systems

The RO shall have the appropriate competence, capability and capacity to perform technical evaluations and/or calculations pertaining to:

- .1 propulsion, auxiliary machinery and steering gear;
- .2 piping; and
- .3 electrical and automation systems,

for compliance with relevant rules and convention requirements pertaining to design, construction and safety.

Module 2C: Subdivision and stability

The RO shall have the appropriate competence, capability and capacity to perform technical evaluations and/or calculations pertaining to:

- .1 intact and damage stability;
- .2 inclining test assessment;
- .3 grain loading stability; and
- .4 watertight and weathertight integrity.

Module 2D: Load line

The RO shall have the appropriate competence, capability and capacity to perform the following technical evaluations and/or calculations pertaining to:

- .1 freeboard calculation; and
- .2 conditions of assignment of freeboard.

Module 2E: Tonnage

The RO shall have the appropriate competence, capability and capacity to perform technical evaluations and/or calculations pertaining to tonnage computation.

Module 2F: Structural fire protection

The RO shall have the appropriate competence, capability, and capacity to perform technical evaluations and/or calculations pertaining to:

- .1 structural fire protection and fire isolation;
- .2 use of combustible materials;
- .3 means of escape; and
- .4 ventilation systems.

Module 2G: Safety equipment

The RO shall have the appropriate competence, capability and capacity to perform technical evaluations and/or calculations pertaining to:

- .1 life-saving appliances and arrangements;
- .2 navigation equipment;
- .3 fire detection and fire alarm systems and equipment;
- .4 fire-extinguishing system and equipment;
- .5 fire control plans;
- .6 pilot ladders and pilot hoists;
- .7 lights, shapes and sound signals; and
- .8 inert gas systems.

Module 2H: Oil pollution prevention

The RO shall have the appropriate competence, capability and capacity to perform technical evaluations and/or calculations pertaining to:

- .1 monitoring and control of oil discharge;
- .2 segregation of oil and ballast water;
- .3 crude oil washing;
- .4 protective location of segregated ballast spaces;
- .5 pumping, piping and discharge arrangements; and
- .6 shipboard oil pollution emergency plans (SOPEPs).

Module 2I: NLS pollution prevention

The RO shall have the appropriate competence, capability and capacity to perform technical evaluations and/or calculations pertaining to:

- .1 list of substances the ship may carry;
- .2 pumping system;
- .3 stripping system;
- .4 tank-washing system and equipment; and
- .5 underwater discharge arrangements.

Module 2J: Radio

The RO shall have the appropriate competence, capability and capacity to perform technical evaluations pertaining to:

- .1 radiotelephony;
- .2 radiotelegraphy; and
- .3 GMDSS.

Alternatively, a professional radio installation inspection service company approved and monitored by the RO according to an established and documented programme may perform these services. This programme is to include the definition of the specific requirements the company and its radio technicians shall satisfy.

Module 2K: Carriage of dangerous chemicals in bulk

The RO shall have the appropriate competence, capability and capacity to perform technical evaluations and/or calculations pertaining to:

- .1 ship arrangement and ship survival capacity;
- .2 cargo containment and material of construction;
- .3 cargo temperature control and cargo transfer;
- .4 cargo tank vent systems and environmental control;
- .5 personnel protection; operational requirements; and
- .6 list of chemicals the ship may carry.

Module 2L: Carriage of liquefied gases in bulk

The RO shall have the appropriate competence, capability and capacity to perform technical evaluations and/or calculations pertaining to:

- .1 ship arrangement and ship survival capacity;
- .2 cargo containment and material of construction;
- .3 process pressure vessels and liquid, vapour and pressure piping systems;
- .4 cargo tank vent systems and environmental control;
- .5 personnel protection;
- .6 use of cargo as fuel; and
- .7 operational requirements.

A2.2.3 Surveys

Module 3A: Survey functions

The RO shall have the appropriate competence, capability and capacity to perform the required surveys under controlled conditions as per the RO's internal quality management system and, representing an adequate geographical coverage and local representation as required. The work to be covered by the staff is described in the relevant sections of the appropriate survey guidelines developed by the Organization.

A2.2.4 Qualifications and training

Module 4A: General qualifications

RO personnel performing, and responsible for, statutory work shall meet, as a minimum, the requirements defined in part 2, section 4.2.5.

Module 4B: Radio survey qualifications

A professional radio installation inspection service company, approved and monitored by the RO according to an established and documented programme, may do surveys. This programme is to include the definition of the specific requirements the company and its radio technicians shall satisfy, including, inter alia, requirements for internal tutored training covering at least:

- .1 radiotelephony;
- .2 radiotelegraphy;
- .3 GMDSS; and
- .4 initial and renewal surveys.

Radio technicians carrying out surveys shall have successfully completed, as a minimum, at least one year of relevant technical school training, the internal tutored training programme of his/her employer and at least one year of experience as an assistant radio technician. For exclusive radio surveyors to the RO, equivalent requirements as above apply.

A2.3 SPECIFICATIONS PERTAINING TO THE VARIOUS CERTIFICATES

A2.3.1 Passenger ship safety certificate

Initial certification, renewal survey

A2.3.1.1 Module Nos. 1A, 2A, 2B, 2C, 2D, 2F, 2G, 2J, 3A, 4A and 4B apply.

A2.3.1.2 For this certification, the system shall cover practical tutored training on the following issues as appropriate for Technical Appraisal and Support staff (TS) and Field Surveyors (FS), respectively:

- .1 TS: SOLAS 74, as amended.
- .2 FS: SOLAS 74, as amended:
 - .1 initial survey, report, and issuance of certificate; and
 - .2 renewal survey, report- and issuance of certificate.

A2.3.2 Cargo ship safety construction certificate

Initial certification, annual/intermediate, renewal surveys

A2.3.2.1 Module Nos. 1A, 2A, 2B, 2C, 2F, 3A and 4A apply.

A2.3.2.2 For this certification the system shall cover practical tutored training on the following issues as appropriate for Technical Appraisal and Support staff (TS) and Field Surveyors (FS), respectively:

- .1 TS: SOLAS 74 chapters II-1, II-2 and XII with any amendments and appropriate classification rules.
- .2 FS: Pertinent technical surveys (class surveys or similar), newbuilding:
 - .1 hull structure and equipment; and
 - .2 machinery and systems installation and testing.
- .3 FS: Pertinent technical surveys (class surveys or similar), ships in operation:
 - .1 annual/intermediate survey;
 - .2 renewal survey; and
 - .3 bottom survey.
- .4 FS: SOLAS 74 chapters II-1, II-2 and XII, as amended:
 - .1 initial survey, report, issuance of certificate;
 - .2 annual/intermediate survey and report; and
 - .3 renewal survey, report and issuance of certificate.

A2.3.3 Cargo ship safety equipment certificate

Initial certification, annual, periodical, renewal surveys

A2.3.3.1 Module Nos. 1A, 2G, 3A and 4A apply.

A2.3.3.2 For this certification the system shall cover practical tutored training on the following issues as appropriate for Technical Appraisal and Support staff (TS) and Field Surveyors (FS), respectively:

- .1 TS: SOLAS 74 chapters II-1, II-2, III and V, as amended, and applicable aspects of COLREG 72, as amended.
- .2 FS: SOLAS 74 chapters II-1, II-2, III and V, as amended, and applicable aspects of COLREG 72, as amended:
 - .1 initial survey, report and issuance of certificate;
 - .2 annual/periodical survey and report; and
 - .3 renewal survey, report and issuance of certificate.

A2.3.4 Cargo ship safety radio certificate

Initial certification, periodical, renewal surveys

A2.3.4.1 Module Nos. 1A, 2J, 3A and 4B apply.

A2.3.4.2 For this certification the system shall cover practical tutored training on the following issues for Technical Appraisal and Support staff (TS) and Field Surveyors (FS) respectively:

- .1 TS: SOLAS 74 chapter IV, as amended.
- .2 FS: Reference Module 4B.

A2.3.5 International Safety Management Code certification

Initial certification, annual/intermediate verifications, renewal certification

A2.3.5.1 All of the modules, with the exception of 2E (tonnage), apply to the extent that they relate to an RO's ability to identify and evaluate the mandatory rules and regulations with which a company's safety management system and ships shall comply.

A2.3.5.2 For this certification, the system shall comply with the qualification and training requirements for ISM Code assessors contained in the *Guidelines on Implementation of the International Safety Management (ISM) Code by Administrations*.

A2.3.6 International load line certificate

Initial certification, annual, renewal surveys

A2.3.6.1 Module Nos. 1A, 2A, 2C, 2D, 3A and 4A apply.

A2.3.6.2 For this certification, the system shall cover practical tutored training on the following issues as appropriate for Technical Appraisal and Support staff (TS) and Field Surveyors (FS), respectively:

- .1 TS: Calculation of freeboard and approval of drawings for conditions of assignment according to ILLC 1966.
- .2 FS: Pertinent technical surveys (class surveys or similar), newbuilding:
 - .1 hull structural survey;
 - .2 hull penetrations and closing appliances; and
 - .3 stability/inclining test.
- .3 FS: Pertinent technical surveys (class surveys or similar), ships in operation:
 - .1 annual survey;
 - .2 renewal survey; and
 - .3 bottom survey.
- .4 FS: Measurement for load line/initial survey report.
- .5 FS: Conditions for assignment/initial survey report.
- .6 FS: Load line marking verification/initial survey report.
- .7 FS: Load line annual survey.
- .8 FS: Load line renewal survey, report and issuance of certificate.

A2.3.7 International oil pollution prevention certificate

Initial certification, annual, intermediate, renewal surveys

A2.3.7.1 Module Nos. 1A, 2A, 2B, 2C, 2H, 3A and 4A apply.

A2.3.7.2 For this certification, the system shall cover practical tutored training on the following issues as appropriate for Technical Appraisal and Support staff (TS) and Field Surveyors (FS), respectively:

- .1 TS: Approval of drawings and manuals according to MARPOL, Annex I.
- .2 FS: MARPOL, Annex I, as amended:
 - .1 initial survey, report and issuance of certificate;
 - .2 annual/intermediate survey and report; and
 - .3 renewal survey, report and issuance of certificate.

A2.3.8 International pollution prevention certificate for the carriage of noxious liquid substances in bulk

Initial certification, annual, intermediate, renewal surveys

A2.3.8.1 Module Nos. 1A, 2A, 2B, 2C, 2I, 3A and 4A apply.

A2.3.8.2 For this certification the system shall cover practical tutored training on the following issues as appropriate for Technical Appraisal and Support staff (TS) and Field Surveyors (FS), respectively:

- .1 TS: Approval of drawings and manuals according to MARPOL, Annex II and appropriate codes.
- .2 FS: MARPOL, Annex II and appropriate codes:
 - .1 initial survey, report and issuance of certificate;
 - .2 annual/intermediate survey and report; and
 - .3 renewal survey, report and issuance of certificate.

A2.3.9 International certificate of fitness for the carriage of dangerous chemicals in bulk

Initial certification, annual, intermediate, renewal surveys

A2.3.9.1 Module Nos. 1A, 2A, 2B, 2C, 2K, 3A and 4A apply.

A2.3.9.2 For this certification the system shall cover practical tutored training on the following issues as appropriate for Technical Appraisal and Support staff (TS) and Field Surveyors (FS), respectively:

- .1 TS: Approval of drawings and manuals according to International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code).
- .2 FS: IBC Code:
 - .1 initial survey, report and issuance of certificate;
 - .2 annual/intermediate survey and report; and
 - .3 renewal survey, report and issuance of certificate.

A2.3.10 International certificate of fitness for the carriage of liquefied gases in bulk

Initial certification, annual, intermediate, renewal surveys

A2.3.10.1 Module Nos. 1A, 2A, 2B, 2C, 2L, 3A and 4A apply.

A2.3.10.2 For this certification the system shall cover practical tutored training on the following issues as appropriate for Technical Appraisal and Support staff (TS) and Field Surveyors (FS), respectively:

- .1 TS: Approval of drawings and manuals according to International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code).
- .2 FS: IGC Code:
 - .1 initial survey, report and issuance of certificate;
 - .2 annual/intermediate survey and report; and
 - .3 renewal survey, report and issuance of certificate.

A2.3.11 International tonnage certificate (1969)

Initial certification

A2.3.11.1 Module Nos. 1A, 2E and 4A apply.

A2.3.11.2 For this certification the system shall cover practical tutored training on the following issues as appropriate for Technical Appraisal and Support staff (TS) and Field Surveyors (FS), respectively:

- .1 TS: Measurement and computation of tonnage according to:
 - .1 1969 Tonnage Measurement Convention; and
 - .2 Pertinent IMO resolutions.
- .2 FS: Marking survey and report.

* * *

Appendix 3

ELEMENTS TO BE INCLUDED IN AN AGREEMENT

A formal written agreement or equivalent between the flag State and the RO should, as a minimum, cover the following items:

- 1 Application
- 2 Purpose
- 3 General conditions
- 4 The execution of functions under authorization:
 - .1 Functions in accordance with the general authorization
 - .2 Functions in accordance with special (additional) authorization
 - .3 Relationship between the organization's statutory and other related activities
 - .4 Functions to cooperate with port States to facilitate the rectification of reported port State control deficiencies or the discrepancies within the organization's purview
- 5 Legal basis of the functions under authorization:
 - .1 Acts, regulations and supplementary provisions
 - .2 Interpretations
 - .3 Deviations and equivalent solutions
- 6 Reporting to the flag State:
 - .1 Procedures for reporting in the case of general authorization
 - .2 Procedures for reporting in the case of special authorization
 - .3 Reporting on classification of ships (assignment of class, alterations and cancellations), as applicable
 - .4 Reporting of cases where a ship did not in all respects remain fit to proceed to sea without danger to the ship or persons on board or presenting unreasonable threat of harm to the environment
 - .5 Other reporting
- 7 Development of rules and/or regulations – Information:
 - .1 Cooperation in connection with development of rules and/or regulations – liaison meetings

- .2 Exchange of rules and/or regulations and information
 - .3 Language and form
- 8 Other conditions:
 - .1 Remuneration
 - .2 Rules for administrative proceedings
 - .3 Confidentiality
 - .4 Liability³
 - .5 Financial responsibility
 - .6 Entry into force
 - .7 Termination
 - .8 Breach of agreement
 - .9 Settlement of disputes
 - .10 Use of subcontractors
 - .11 Issue of the agreement
 - .12 Amendments
- 9 Specification of the authorization from the flag State to the organization:
 - .1 Ship types and sizes
 - .2 Conventions and other instruments, including relevant national legislation
 - .3 Approval of drawings
 - .4 Approval of material and equipment
 - .5 Surveys
 - .6 Issuance of certificates
 - .7 Corrective actions
 - .8 Withdrawal of certificates
 - .9 Reporting

³ ROs and its employees who are involved in or responsible for delivery of statutory certification and services may be required by the law of the flag State to be covered by professional indemnity or professional liability insurance in the event that liability is finally and definitively imposed on the flag State for loss or damage which is proved in a court of law to have been caused by any negligent act or omission by its RO. In this connection, the flag State may also consider placing a limitation on the level of liability and indemnification to be covered under that insurance or other compensation arrangements.

- 10 The flag State's supervision of duties delegated to the organization:
- .1 Documentation of quality assurance system
 - .2 Access to internal instructions, circulars and guidelines
 - .3 Access by the flag State to the organization's documentation relevant to the flag State's fleet
 - .4 Cooperation with the flag State's inspection and verification work
 - .5 Provision of information and statistics on, e.g. damage and casualties relevant to the flag State's fleet.
- _____

ANNEX 24

RESOLUTION MEPC.238(65)

Adopted on 17 May 2013

**AMENDMENTS TO THE ANNEX OF THE PROTOCOL OF 1978 RELATING TO
THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF
POLLUTION FROM SHIPS, 1973**

(Amendments to MARPOL Annexes I and II to make the RO Code mandatory)

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee conferred upon it by international conventions for the prevention and control of marine pollution,

NOTING article 16 of the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1973 Convention") and article VI of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1978 Protocol") which together specify the amendment procedure of the 1978 Protocol and confer upon the appropriate body of the Organization the function of considering and adopting amendments to the 1973 Convention, as modified by the 1978 Protocol (MARPOL),

HAVING CONSIDERED the draft amendments to Annexes I and II of MARPOL to make the RO Code mandatory,

1. ADOPTS, in accordance with article 16(2)(d) of the 1973 Convention, the amendments to Annexes I and II of MARPOL, the text of which is set out in the annex to the present resolution;
2. DETERMINES, in accordance with article 16(2)(f)(iii) of the 1973 Convention, that the amendments shall be deemed to have been accepted on 1 July 2014 unless, prior to that date, not less than one third of the Parties or Parties the combined merchant fleets of which constitute not less than 50 per cent of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objection to the amendments;
3. INVITES the Parties to note that, in accordance with article 16(2)(g)(ii) of the 1973 Convention, the said amendments shall enter into force on 1 January 2015 upon their acceptance in accordance with paragraph 2 above;
4. REQUESTS the Secretary-General, in conformity with article 16(2)(e) of the 1973 Convention, to transmit to all Parties to MARPOL certified copies of the present resolution and the text of the amendments contained in the annex;
5. REQUESTS FURTHER the Secretary-General to transmit to the Members of the Organization which are not Parties to MARPOL copies of the present resolution and its annex.

* * *

ANNEX

AMENDMENTS TO MARPOL ANNEXES I AND II

Amendments to MARPOL Annex I

Regulation 6

The existing text of the last sentence of paragraph 3.1 is replaced by the following:

"Such organizations, including classification societies, shall be authorized by the Administration in accordance with the provisions of the present Convention and with the Code for Recognized Organizations (RO Code), consisting of part 1 and part 2 (the provisions of which shall be treated as mandatory) and part 3 (the provisions of which shall be treated as recommendatory), as adopted by the Organization by resolution [MEPC...], as may be amended by the Organization, provided that:

- .1 amendments to part 1 and part 2 of the RO Code are adopted, brought into force and take effect in accordance with the provisions of article 16 of the present Convention concerning the amendment procedures applicable to this annex;
- .2 amendments to part 3 of the RO Code are adopted by the Marine Environment Protection Committee in accordance with its Rules of Procedure; and
- .3 any amendments referred to in .1 and .2 adopted by the Maritime Safety Committee and the Marine Environment Protection Committee are identical and come into force or take effect at the same time, as appropriate."

Amendments to MARPOL Annex II

Regulation 8

The existing text of paragraph 2.2 is replaced by the following:

"Such organizations, including classification societies, shall be authorized by the Administration in accordance with the provisions of the present Convention and with the Code for Recognized Organizations (RO Code), consisting of part 1 and part 2 (the provisions of which shall be treated as mandatory) and part 3 (the provisions of which shall be treated as recommendatory), as adopted by the Organization by resolution [MEPC...], as may be amended by the Organization, provided that:

- .1 amendments to part 1 and part 2 of the RO Code are adopted, brought into force and take effect in accordance with the provisions of article 16 of the present Convention concerning the amendment procedures applicable to this annex;
- .2 amendments to part 3 of the RO Code are adopted by the Marine Environment Protection Committee in accordance with its Rules of Procedure; and
- .3 any amendments referred to in .1 and .2 adopted by the Maritime Safety Committee and the Marine Environment Protection Committee are identical and come into force or take effect at the same time, as appropriate."

ANNEX 25

STATEMENT BY THE DELEGATION OF IRELAND ON THE CODE FOR RECOGNIZED ORGANIZATIONS (RO CODE)

Ireland considers that the RO Code contains a set of minimum requirements on which States can elaborate and improve as appropriate for the enhancement of maritime safety and the protection of the environment.

In particular, as regards the RO Code, Ireland wishes to make clear that nothing in the said Code shall be construed to restrict or limit in any way the fulfilment of its obligations under the law of the European Union in relation to:

- the definition of "statutory certificates" and "class certificates";
- the scope of the obligations and criteria laid down for recognized organizations;
- the duties of the European Commission as regards the recognition, assessment and, where appropriate, the imposition of corrective measures or sanctions on recognized organizations.

In the case of an IMO audit, Ireland will state that only compliance with those provisions of the relevant international conventions which Ireland has accepted, including in the terms of this declaration, shall be verified

ANNEX 26

STATEMENT BY THE DELEGATION OF JAPAN ON PORT RECEPTION FACILITIES FOR THE IMPLEMENTATION OF THE REVISED MARPOL ANNEX V

Thank you Mr. Chairman.

First of all, this delegation would like to express its appreciation to the co-sponsors for their independent investigation for the situation of port reception facilities.

However, with respect to the document of MEPC 65/10, this delegation has to say it is regrettable that the information on Japanese ports shown in the table of Annex 1 of this document did not reflect accurate situations on PRF in Japan, just as the delegation of Marshal Islands has mentioned briefly.

In order to ensure the full implementation of regulations in revised Annex V, the Japanese Government took necessary actions to amend corresponding domestic laws last year. Those amendments entered into force on January 1, 2013 in conjunction with the effective date of revised Annex V. Furthermore, in December 2012, the Japanese Government developed "guidelines for port authorities in reception of garbage from ships". Port authorities including those listed in MEPC65/10, Annex 1 are taking corresponding measures to ensure adequate reception of garbage from ships based on the guidelines.

The vast majority of cargos shipped to Japan so far was not declared as HME and thus did not require procedures in accordance with regulations in MARPOL Annex V. The guidelines above identified existing treatment facilities within the country which are able to receive HME cargo residues and wash water. For a few cargoes declared as HME, the Japanese Government has ensured smooth unloading and transportation of garbage to such facilities, in close collaboration with port authorities, shipping companies, shippers as well as waste treatment operators.

Given the limited quantity and intermittent discharge pattern of HME cargo residues and wash water, it does not provide financial and operational good reason to establish a new PRF in each port and terminal. Instead, Japan has ensured their reception at ports and transfer of such HME garbage to existing treatment facilities located in the country.

Lastly, this delegation would like to express its intention to provide more detailed information about Japan's efforts if necessary, and request the Secretariat to keep a record about our comment above in the final report of this session, as this kind of information would affect the Nation's confidence and reputation, or even worse, it might cause a negative effect on trade.

ANNEX 27

DRAFT AMENDMENTS TO MARPOL ANNEX V (THE RECORD OF GARBAGE DISCHARGES)

1 The existing Record of Garbage Discharges contained in the appendix is replaced by the following:

RECORD OF GARBAGE DISCHARGES

Ship's name: _____

Distinctive No., or letters: _____

IMO No.: _____

Garbage categories:

- A. Plastics
- B. Food wastes
- C. Domestic wastes
- D. Cooking oil
- E. Incinerator Ashes
- F. Operational wastes
- G. Cargo residues
- H. Animal Carcass(es)
- I. Fishing gear

Date/time	Position of the ship (latitude/longitude/port) Remarks: (e.g. accidental loss; water depth if known; cargo residues start/stop position)	Category	Estimated amount discharged		Estimated amount Incinerated (m ³)	Certification/Signature
			Into sea (m ³)	To reception facilities (m ³)		
/						/
/						/

Master's signature: _____ Date: _____

ANNEX 28

RESOLUTION MEPC.239(65)

Adopted on 17 May 2013

**AMENDMENTS TO THE 2012 GUIDELINES FOR THE IMPLEMENTATION
OF MARPOL ANNEX V**

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee (the Committee) conferred upon it by the international conventions for the prevention and control of marine pollution,

RECALLING ALSO that Annex V of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 (MARPOL) relating thereto provides regulations for the prevention of pollution by garbage from ships,

NOTING that the Committee, at its sixty-second session, adopted the revised MARPOL Annex V by resolution MEPC.201(62), which entered into force on 1 January 2013,

NOTING ALSO that the Committee, at its sixty-third session, adopted the *2012 Guidelines for the Implementation of MARPOL Annex V* by resolution MEPC.219(63),

HAVING CONSIDERED, at its sixty-fifth session, the proposed amendments to the *2012 Guidelines for the Implementation of MARPOL Annex V*,

1. ADOPTS the amendments to the *2012 Guidelines for the Implementation of MARPOL Annex V*, the text of which is set out in the annex to this resolution;
2. INVITES Governments, in implementation of the provisions of the revised MARPOL Annex V, to take into account the *2012 Guidelines for the Implementation of MARPOL Annex V*, as amended by this resolution; and
3. AGREES to keep these Guidelines under review in light of the experience gained.

* * *

ANNEX

**AMENDMENTS TO THE 2012 GUIDELINES FOR THE IMPLEMENTATION
OF MARPOL ANNEX V**

- 1 In paragraph 2.4.3, a new bullet point is inserted at the end as follows:
 - E-waste generated on board (e.g. electronic cards, gadgets, instruments, equipment, computers, printer cartridges, etc.)."
- 2 A new paragraph 5.2.8 is added as follows:

"E-waste such as electronic cards, gadgets, equipment, computers, printer cartridges, etc."

ANNEX 29

DRAFT AMENDMENTS TO THE INTERNATIONAL CODE FOR THE CONSTRUCTION AND EQUIPMENT OF SHIPS CARRYING DANGEROUS CHEMICALS IN BULK (IBC CODE)

Chapter 1 – General

- 1 New paragraphs 1.3.37 and 1.3.38 are added as follows:

1.3.37 Purging means the introduction of inert gas into a tank which is already in an inert condition with the object of further reducing the oxygen content; and/or reducing the existing hydrocarbon or other flammable vapours content to a level below which combustion cannot be supported if air is subsequently introduced into the tank.

1.3.38 Gas-freeing means the process where a portable or fixed ventilation system is used to introduce fresh air into a tank in order to reduce the concentration of hazardous gases or vapours to a level safe for tank entry.

Chapter 8 – Cargo tank venting and gas-freeing arrangements

- 2 In paragraph 8.15, the references to "SOLAS regulations II-2/4.5.3 and 4.5.6" are replaced by the references to "SOLAS regulations II-2/4.5.3, 4.5.6 and 16.3.2".

- 3 A new paragraph 8.5 is inserted as follows:

8.5 Cargo tank purging

When the application of inert gas is required by 11.1.1, before gas freeing, the cargo tanks shall be purged with inert gas through outlet pipes with cross sectional area such that an exit velocity of at least 20 m/s can be maintained when any three tanks are being simultaneously supplied with inert gas. The outlets shall extend not less than 2 m above the deck level. Purging shall continue until the concentration of hydrocarbon or other flammable vapours in the cargo tanks has been reduced to less than 2 per cent by volume.

- 4 The existing paragraph 8.5 and subparagraphs 8.5.1, 8.5.2 and 8.5.3 are renumbered as paragraph 8.6 and subparagraphs 8.6.1, 8.6.2 and 8.6.3, respectively.

Chapter 9 – Environmental control

- 5 The chapeau of paragraph 9.1.3 is replaced by the following:

9.1.3 Where inerting or padding of cargo tanks is required by this Code in column "h" of chapter 17:

Chapter 11 – Fire protection and fire extinction*

- 6 Subparagraph 11.1.1.1 is replaced by the following:

11.1.1.1 regulations 10.8 and 10.9 shall not apply;

Chapter 15 – Special requirements

7 Paragraph 15.13.5 is replaced by the following:

15.13.5 When a product containing an oxygen dependent inhibitor is to be carried in a ship:

- .1 constructed on or after date of entry into force of the new SOLAS IG requirements, and for which inerting is required as per paragraph 11.1.1 of this Code, the application of inert gas shall not take place before loading or during the voyage, but shall be applied before commencement of unloading*.
- .2 constructed before the entry into force of the SOLAS amendments for IG, the product shall be carried without inertion (in tanks of a size not greater than 3,000 m³). Such cargo shall not be carried in a tank requiring inertion under the requirements of SOLAS chapter II-2*

* When new Arrangements for the carriage of Oxygen dependent inhibitors is agreed.

Chapter 17 – Summary of minimum requirements

8 The explanatory notes for "Tank environment control (column h)" are replaced by the following:

Tank environmental control (<i>column h</i>)	Inert:	inerting (9.1.2.1)
	Pad:	liquid or gas padding (9.1.2.2)
	Dry:	drying (9.1.2.3)
	Vent:	natural or forced ventilation (9.1.2.4)
	No:	no special requirements under this Code (inerting requirements may be required under SOLAS)

ANNEX 30

RESOLUTION MEPC.240(65)

Adopted on 17 May 2013

**2013 AMENDMENTS TO THE REVISED GUIDELINES AND SPECIFICATIONS
FOR OIL DISCHARGE MONITORING AND CONTROL SYSTEMS FOR
OIL TANKERS (RESOLUTION MEPC.108(49))**

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee conferred upon it by international conventions for the prevention and control of marine pollution,

NOTING resolution MEPC.108(49) by which the Committee adopted the Revised Guidelines and Specifications for Oil Discharge Monitoring and Control Systems for Oil Tankers,

NOTING ALSO that the revised MARPOL Annex I was adopted by resolution MEPC.117(52) and entered into force on 1 January 2007,

HAVING CONSIDERED, at its sixty-fifth session, proposed amendments to the Revised Guidelines and Specifications for Oil Discharge Monitoring and Control Systems for Oil Tankers, prepared by the Sub-Committee on Bulk Liquids and Gases at its seventeenth session,

1. ADOPTS the 2013 Amendments to the Revised Guidelines and Specifications for Oil Discharge Monitoring and Control Systems for Oil Tankers, the text of which is set out in the annex to this resolution;

2. RECOMMENDS Governments to apply the annexed amendments when approving oil discharge monitoring and control systems being installed under regulation 31 of MARPOL Annex I on oil tankers constructed on or after 1 January 2005.

* * *

ANNEX

**2013 AMENDMENTS TO THE REVISED GUIDELINES AND SPECIFICATIONS FOR OIL
DISCHARGE MONITORING AND CONTROL SYSTEMS FOR OIL TANKERS**

**REVISED GUIDELINES AND SPECIFICATIONS FOR OIL DISCHARGE MONITORING
AND CONTROL SYSTEMS FOR OIL TANKERS**

- 1 In the Table of Contents, a new entry 3.7 is added, as follows:

"3.7 Bio-fuels"
- 2 In paragraphs 1.1.1 and 1.1.2.1, the references "regulation 15(3)(a) of Annex I of MARPOL" are replaced by the references "regulation 31 of MARPOL Annex I."
- 3 Paragraph 1.1.3 is replaced by the following:

"1.1.3 These Guidelines and Specifications also apply to oil content monitoring systems used for monitoring each individual bio-fuel blend containing 75 per cent or more of petroleum oil, carried in accordance with paragraph 4.1 of MEPC.1/Circ.761. Wherever in these Guidelines and Specifications reference is made to oil being monitored, this applies likewise to bio-fuel blends."
- 4 In paragraph 2.1, the references "Annex I of MARPOL" and "regulation 15(3)(a)" are replaced by the references "MARPOL Annex I" and "regulation 31", respectively.
- 5 In paragraph 2.2, the references "regulation 15" and "regulation 9(1)(a)" are replaced by the references "regulation 31" and "regulation 34.1", respectively.
- 6 In section 3, a new definition is added, as follows:

"3.7 Bio-fuels

Bio-fuels are products as recorded in annex 11 of the MEPC.2/Circular which are intended for blending with petroleum oil and may be shipped as blends in accordance with MEPC.1/Circ.761, as amended."
- 7 A new paragraph 5.7 is added, as follows:

"5.7 Manufacturer recommended spares for the ODME should be carried to ensure the operation of the equipment."
- 8 The existing paragraph 5.7 is renumbered as paragraph 5.8.
- 9 In paragraph 6.1.1, the reference "regulation 18" is replaced by the reference "regulation 30".
- 10 The footnote associated with paragraph 6.1.6 is replaced by the following:

"* As specified in IEC publication 92 or an equivalent standard acceptable to the administration."
- 11 In paragraph 6.8.2, the references "regulation 9(1)(a)(iv) and (v)" are replaced by the references "regulation 31.1.4 and 31.1.5".

- 12 The chapeau of paragraph 6.11.1 and subparagraph .1 is replaced by the following:
- "6.11.1 The alternative means of obtaining information in the event of a failure in the monitoring system should follow the requirements in MARPOL Annex I, regulation 31.4 and the operational manual as approved by the Administrations and should be as follows:
- .1 oil content meter or sampling system: location and measurement of the oil/water interface using the equipment as required in regulation 32, visual observation of the surface of the water adjacent to the effluent discharge and recording the relevant data for the discharge accurately in the Oil Record Book Part II in sections H and I;"
- 13 In the footnote associated with subparagraph 6.12.2, the reference "regulation 9(1)(a)(5)" is replaced by the reference "regulation 34.1.5".
- 14 In paragraph 7.2.2, after the words "white products", insert the words ", individual biofuel blends".
- 15 In subparagraph 8.3.3, the references "regulations 9(1)(a)(iv) and (v)" are replaced by the references "regulations 34.1.4 and 34.1.5".

ANNEX, PART 1 – TEST AND PERFORMANCE SPECIFICATIONS FOR TYPE APPROVAL OF OIL CONTENT METERS

- 16 In the table under paragraph 1.2.6, under the column "Parameters Tolerance" and row "6", the text "RMG 35 Parameters as per ISO 8217:1996 (table 2)" is replaced by the following text:
- "RMG 35 Parameters as per ISO 8217:2010/Corr 1:2011 (tables 1 and 2)"
- 17 In paragraph 1.2.7, the reference standard "ISO 8217:1996 (table 1)" is replaced by the referenced standard "ISO 8217:2010/Corr 1:2011 (tables 1 and 2)".
- 18 New paragraph 1.2.8 is added, as follows:
- "1.2.8 If the meter is to be considered suitable for an individual biofuel blend containing 75 per cent or more of petroleum oil, it should also be tested against each such substance for which approval is required, in a manner similar to the tests set out in paragraphs 1.2.5 and 1.2.6. The high shear pump shown in figure 1 should be kept in operation at high speed during this test to assist in dissolving the appropriate fraction of the substance in the water stream."
- 19 New paragraph 1.2.9 is added, as follows:
- "1.2.9 Individual Biofuel blends should be tested at 75 per cent and 99 per cent petroleum oil."
- 20 The existing paragraphs 1.2.8 to 1.2.19 are renumbered as paragraphs 1.2.10 to 1.2.21.

**APPENDIX, CERTIFICATE OF TYPE APPROVAL FOR OIL CONTENT METERS
INTENDED FOR MONITORING THE DISCHARGE OF OIL-CONTAMINATED WATER
FROM THE CARGO TANK AREAS OF OIL TANKERS**

21 Under the "The oil content meter is acceptable for the following applications:", the text "Oil-like noxious liquid substances, other products, or applications, listed below" is replaced by the following:

"* Individual biofuel blends containing 75 per cent or more of petroleum oil, other products, or applications, listed below"

**APPENDIX, TEST DATA AND RESULTS OF TESTS CONDUCTED ON AN OIL CONTENT
METER IN ACCORDANCE WITH PART 1 OF THE ANNEX TO THE GUIDELINES AND
SPECIFICATIONS CONTAINED IN IMO RESOLUTION MEPC.108(49)**

22 The table for "OIL LIKE noxious liquid substances, other products or applications" is deleted, and tables for "INDIVIDUAL BIOFUEL BLENDS AND CONCENTRATIONS" and "OTHER PRODUCTS OR APPLICATIONS" are added, as follows:

INDIVIDUAL BIOFUEL BLENDS AND CONCENTRATIONS*

		READINGS (ppm)				
		Indicated	Measured	Grab sample	REMARKS	
Bio-Fuel Blend 75% Petroleum Oil Name of Bio-fuel and petroleum oil components % % 15 100 90% M.F.S.V. = RECORDED ZERO			
			
			
			
			
			
			
			
			
		RE-ZERO	YES/NO**
				TIME	mins	
				RECALIBRATE	YES/NO**	
				TIME	mins	
				CLEAN	YES/NO**	
				TIME	mins	
Bio-Fuel Blend 99% Petroleum Oil Name of Bio-fuel and petroleum oil components % % 15 100 90% M.F.S.V. = RECORDED ZERO			
			
			
			
			
			
			
			
			
		RE-ZERO	YES/NO**
				TIME	mins	
				RECALIBRATE	YES/NO**	
				TIME	mins	
				CLEAN	YES/NO**	
				TIME	mins	

RESPONSE TIMES

Seconds

First detectable reading	63 ppm1
	90 ppm
Stabilized maximum reading or 100 ppm ppm
First detectable drop	37 ppm2
	10 ppm
Stabilized minimum reading ppm
RESPONSE TIME = $\frac{1+2}{2}$	=

* This page should be included in the certificate only if the oil content meter has been tested against bio-fuel blends.
 ** Delete as appropriate.

OTHER PRODUCTS OR APPLICATIONS*

		READINGS (ppm)			REMARKS
		Indicated	Measured	Grab sample	
Name of product		
..... 15		
..... 100		
90% M.F.S.V. =		
RECORDED ZERO				RE-ZERO YES/NO**
					TIME Mins
					RECALIBRATE YES/NO**
					TIME Mins
					CLEAN YES/NO**
					TIME Mins
Name of product					
..... 15		
..... 100		
90% M.F.S.V. =		
RECORDED ZERO				RE-ZERO YES/NO**
					TIME Mins
					RECALIBRATE YES/NO**
					TIME Mins
					CLEAN YES/NO**
					TIME Mins

* This page should be included in the certificate only if the oil content meter has been tested against other products and applications substances.
** Delete as appropriate.

ANNEX 31

STATEMENTS BY THE DELEGATION OF THE UNITED KINGDOM AND THE OBSERVERS FROM CSC AND IPTA ON POLLUTION INCIDENTS IN THE ENGLISH CHANNEL

Statement by the delegation of the United Kingdom

Firstly, can I thank the Distinguished Delegate from CSC for bringing the recent incident(s) on the South Coast of the UK to the attention of the Committee.

The United Kingdom is actively trying to identify the vessel involved. We are making good progress towards doing so. We will then be able to determine whether the discharge of this product was carried out in accordance with MARPOL Annex II requirements.

What should however be borne in mind is that at this moment in time it is not known whether or not this was a legal or illegal discharge. If it is an illegal discharge then the MCA will prosecute the offender.

In terms of what can be done to prevent such incidents in the future.

Even before this incident experts in a number of European countries including the UK, had commenced further consideration of the discharge of high viscosity products from chemical tankers. Once the results of this study are known they will be submitted to the UN's International Maritime Organisation for consideration by the wider international maritime community.

If the membership of the IMO are of the view that tighter control of the discharge of cargo residues and tank washings is required then the necessary steps for reviewing and revising the Convention for the prevention of pollution from ships will be tabled at the IMO.

The United Kingdom recognizes that under the existing Annex II requirements chemical tankers can legally discharge tank washings containing cargo residues. However, in light of this incident, we would ask shipowners/operators to carefully consider the environmental impact of discharging products that are classified as 'Persistent Floaters' and to carry out a pre-wash to ensure the quantity of cargo residues discharged to the sea is kept to an absolute minimum.

Thank you, Mr Chairman

Statement by the observer from the Clean Shipping Coalition

Thank you Mr Chairman.

The Clean Shipping Coalition would like to take this opportunity to comment on recent serious pollution incidents in the English Channel.

This year, over 4,000 seabirds have been recorded washed up dead or dying along the south coast of England, covered in the substance polyisobutylene, alternatively polyisobutene or PIB. This substance, when discharged into the sea, coalesces into a glue-like consistency, coating birds' wings and bodies and preventing them from feeding or flying.

The impact on populations at sea is likely to have been far higher, possibly affecting up to 40,000 birds. The longer term impacts of releasing PIB on other parts of the marine ecosystem are currently not well studied or understood.

The cause of this tragedy is still being investigated. However, the exact origin of previous PIB incidents has rarely been found and to our knowledge there have been no successful prosecutions against breaches of the MARPOL Convention in relation to PIB.

Mr Chairman, Under Annex II of MARPOL, the various forms of PIB are classified as Category Y, where although it is deemed to be a hazard that justifies a limitation on its release, it remains legal for a ship to discharge PIB under certain conditions.

It is our understanding, however, that the testing of these substances to determine Annex II classification does not take place in realistic marine conditions, and in PIB's case does not sufficiently consider the full range of potential impacts of PIB upon marine ecosystems when mixed with seawater, beyond whether the substance floats or sinks.

We also simply do not know how much PIB is released into the marine environment as part of routine tank-washing operations, and the cumulative impacts of these chronic releases.

As such, Mr Chairman, it is our opinion that the risks of releasing PIB into the marine environment in any quantity are underestimated, and that an urgent review is needed of PIB's classification status under MARPOL Annex II. We are also concerned that when legal discharges of a harmful substance are allowed it becomes more difficult to stop illegal discharges, as ships have a legitimate reason for proceeding to sea with the waste on board. This week, leading UK wildlife charities signed a joint statement with the UK Chamber of Shipping, supported by the UK ports and maritime business sectors, strongly supporting such a review. There are copies of this statement on the table outside this meeting room and here at the CSC desk.

We would like to urge IMO Member States to respond swiftly to this serious issue, take a proactive approach to such a review, and prepare proposals for consideration by MEPC66 and/or BLG18 as appropriate.

PIB has no proper place in our precious oceans and seas, and we must ensure that the classification of PIB under MARPOL fully reflects its impacts on marine life.

We would like this statement included in the record of the meeting and have handed a copy to the Secretariat.

Thank you very much for your attention.

Statement made by the observer from IPTA

The sight of seabirds being washed up on English beaches is extremely distressing and IPTA and its members deplore any actions that could lead to this.

However while the outrage that has been generated is entirely understandable, we would caution against a rush to amend the regulations until such time as it has been possible to establish exactly how these regrettable incidents occurred. Polyisobutylene is a high volume product that is shipped all over the world in various grades. All the grades that we are aware of are discharged at high temperature and meet the definition of high viscosity substances under Category Y of MARPOL Annex II, meaning that a prewash ashore is carried out upon completion of discharge. This, together with the fact that these incidents on the UK coast

have occurred only relatively recently and are extremely localised would suggest that it is unlikely that they are the result of normal chemical tanker operational procedures. There is thus the distinct possibility that amending the regulations would achieve nothing in terms of preventing further discharges. We would suggest, therefore, that the highest priority must be given to establishing the origin of these discharges and only then can we decide how to deal with them.

What is not in doubt is that we must find a way of preventing a repetition of these extremely distressing incidents, and whatever the outcome of the investigations, IPTA will continue to work closely with the MCA, the IMO and other interested parties to this end.

ANNEX 32

DRAFT ASSEMBLY RESOLUTION

NOTIFICATION AND CIRCULATION THROUGH THE GLOBAL INTEGRATED SHIPPING INFORMATION SYSTEM (GISIS)

THE ASSEMBLY,

RECALLING article 15(j) of the Convention on the International Maritime Organization concerning the functions of the Assembly in relation to regulations and guidelines concerning maritime safety and the prevention and control of marine pollution from ships,

RECALLING ALSO that one of the goals of the Organization is to ensure the consistent and effective implementation of IMO instruments globally and compliance with their requirements,

RECALLING FURTHER that, since 2004, the Strategic Plan for the Organization has promoted the effective use of information and communication technology and the availability of, and access to, information relating to ship safety and security and environmental protection (i.e. transparency),

RECALLING IN PARTICULAR that, by resolution A.1029(26) on the *Global Integrated Shipping Information System (GISIS)*, it recognized that GISIS aims at facilitating, inter alia, Member States' compliance with reporting requirements, and urged Member States specifically to use GISIS reporting facilities to sustain and, even, enhance compliance with mandatory reporting requirements, as contained in those mandatory instruments to which they are Parties, thereby potentially assisting them in the context of the Voluntary IMO Member State Audit Scheme,

NOTING WITH SATISFACTION that GISIS has been continuously developed and additional modules have been released since its launch in 2005 in order to allow a wider coverage of direct reporting by Member States in compliance with existing requirements,

RECOGNIZING that, to promote the implementation of mandatory IMO instruments, the effective use of information and communication technology would contribute significantly to all Member States fulfilling their obligations of mandatory reporting and the circulation of any such notification by the Organization could be achieved through the GISIS system,

RECOGNIZING ALSO the important role the system could play in respect of enhancing the rate of notification and potentially reducing the administrative burden for the Contracting Governments or Parties,

RECOGNIZING FURTHER the fact that, once the Organization has been notified through GISIS by a Contracting Government or Party, the related mandatory report would also become accessible to other Contracting Governments or Parties through GISIS, and the administrative burden of the Organization could be reduced,

HAVING CONSIDERED the recommendation made by the Marine Environment Protection Committee, at its [sixty-fifth session (13 to 17 May 2013)], and the Maritime Safety Committee, at its [ninety-second session (12 to 21 June 2013)],

1. AGREES that notification through GISIS should be considered as one effective way for Contracting Governments or Parties to IMO instruments to fulfil their reporting obligations under the various mandatory IMO instruments;
2. FURTHER AGREES that once Contracting Governments or Parties have notified through GISIS in respect of a reporting requirement to the Organization, the requirement for the Organization to circulate any such notification under the IMO instrument concerned would have been met;
3. URGES Member States to use the reporting facilities available through GISIS to fulfil their reporting obligations under the various IMO instruments and to work towards the improvement of the quality of the data being collected through GISIS by implementing comprehensive validation processes when entering data into the system; and
4. REQUESTS the Secretary-General to continue developing the system, particularly its modules related to mandatory reporting requirements, in close cooperation with Member States, IMO organs, international organizations and all other stakeholders of the global maritime community, as appropriate.

ANNEX 33

DRAFT ASSEMBLY RESOLUTION

GUIDELINES TO ASSIST INVESTIGATORS IN THE IMPLEMENTATION OF THE CASUALTY INVESTIGATION CODE (RESOLUTION MSC.255(84))

THE ASSEMBLY,

RECALLING Article 15(j) of the Convention on the International Maritime Organization concerning the functions of the Assembly in relation to regulations and guidelines concerning maritime safety and the prevention and control of marine pollution from ships,

NOTING WITH CONCERN that, despite the best endeavours of the Organization, casualties and incidents resulting in loss of life, loss of ships and pollution of the marine environment continue to occur,

NOTING ALSO that the safety of seafarers and passengers and the protection of the marine environment can be enhanced by timely and accurate reports identifying the circumstances and causes of marine casualties and incidents,

NOTING FURTHER the rights and obligations of coastal and flag States under the provisions of articles 2 and 94 of the United Nations Convention on the Law of the Sea (UNCLOS),

NOTING IN ADDITION the responsibilities of flag States under the provisions of the International Convention for the Safety of Life at Sea (SOLAS, regulation I/21), the International Convention on Load Lines, 1966 (article 23) and the International Convention for the Prevention of Pollution from Ships (MARPOL, article 12), to conduct casualty investigations and to supply the Organization with relevant findings,

CONSIDERING that each Administration shall conduct investigations of marine casualties and incidents, in accordance with SOLAS regulation XI-1/6, as supplemented by the provisions of the *Code of the international standards and recommended practices for a safety investigation into a marine casualty or marine incident (Casualty Investigation Code)* adopted by resolution MSC.255(84),

ACKNOWLEDGING that the investigation and proper analysis of marine casualties and incidents can lead to greater awareness of casualty causation and result in remedial measures, including better training, for the purpose of enhancing safety of life at sea and protection of the marine environment,

RECOGNIZING the need for *Guidelines to assist investigators in the implementation of the Casualty Investigation Code* (resolution MSC.255(84)) to provide, as far as national laws allow, a common approach for States to adopt in the conduct of marine safety investigations into marine casualties and marine incidents,

RECOGNIZING ALSO the international nature of shipping and the need for cooperation between Governments having a substantial interest in a marine casualty or incident for the purpose of determining the circumstances and causes thereof,

HAVING CONSIDERED the recommendations made by the Maritime Safety Committee at its [ninety-second] session and by the Marine Environment Protection Committee at its [sixty-fifth] session:

1. ADOPTS the *Guidelines to assist investigators in the implementation of the Casualty Investigation Code* (resolution MSC.255(84)) set out in the annex to the present resolution;
2. INVITES all Governments concerned to take appropriate measures to give effect to the Guidelines as soon as possible in order to allow effective analysis when conducting a marine safety investigation and taking preventive actions;
3. REVOKES resolutions A.849(20) and A.884(21).

* * *

ANNEX

GUIDELINES TO ASSIST INVESTIGATORS IN THE IMPLEMENTATION OF THE CASUALTY INVESTIGATION CODE (RESOLUTION MSC.255(84))

1 INTRODUCTION

1.1 The purpose of these Guidelines is to provide practical advice for the systematic investigation of marine casualties and incidents and to allow the development of effective analysis and preventive action. The overall objective is to prevent similar casualties and incidents in the future.

1.2 The ultimate purpose of a marine safety investigation is to advance maritime safety and protection of the marine environment. In the context of these Guidelines, this goal is achieved by identifying safety deficiencies through a systematic safety investigation of marine casualties and incidents, and then recommending or effecting change in the maritime system to correct these deficiencies. It is not the purpose of a safety investigation to determine liability or apportion blame.

1.3 These Guidelines should result in an increased awareness by all involved in the marine industry of the human, organizational, environmental, technical and external factors that may be involved in marine casualties and incidents. This awareness should lead to proactive measures by the maritime community which in turn should result in the saving of lives, ships, cargo and the protection of the marine environment, improvements to the lives of marine personnel, and safer shipping operations.

1.4 These Guidelines apply, as far as national laws allow, to the investigation of marine casualties or incidents in which either one or more States have a substantial interest because the casualty or incident involves a ship under or within their jurisdiction.

2 DEFINITIONS

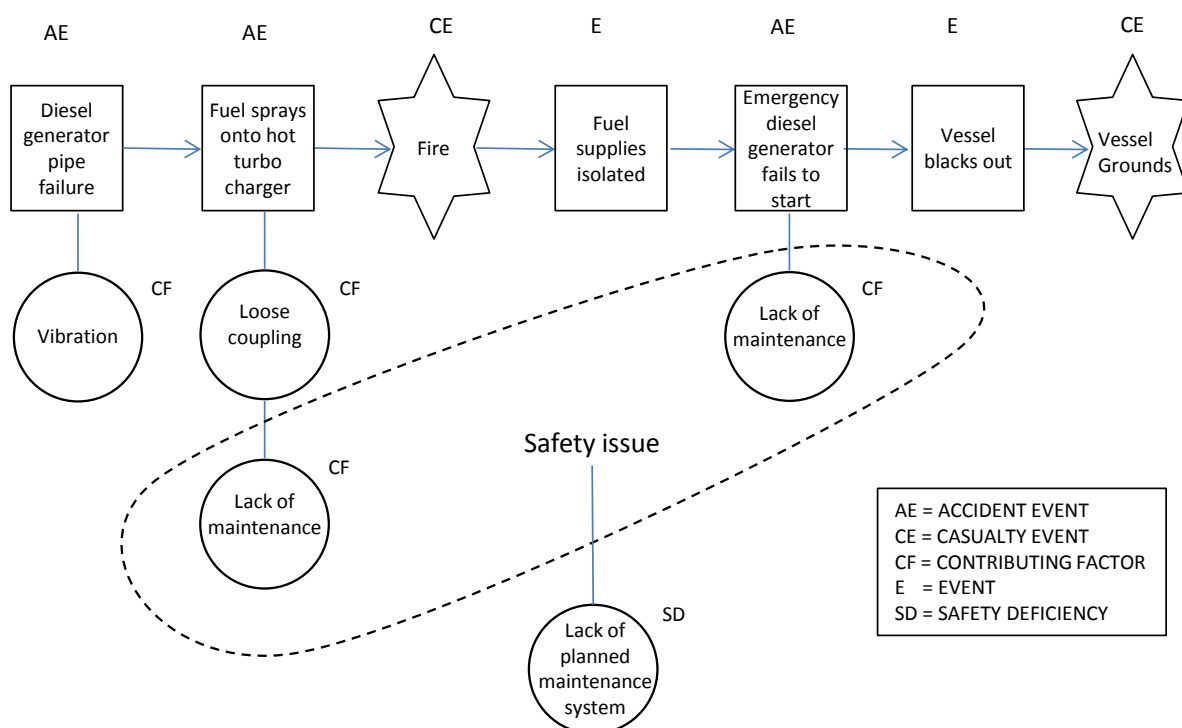
2.1 Table of definitions

2.2 See chapter 2 of the Casualty Investigation Code (resolution MSC.255(84)) for terms not defined in these guidelines

Event	An action, omission or other happening.
Casualty event	The marine casualty or marine incident, or one of a number of connected marine casualties and/or marine incidents forming the overall occurrence. (e.g. a fire leading to a loss of propulsion leading to a grounding).
Accident event	An event that is assessed to be inappropriate and significant in the sequence of events that led to the marine casualty or marine incident. (e.g. human erroneous action, equipment failure, etc.).
Contributing factor	A condition that may have contributed to an accident event or worsened its consequence. (e.g. man/machine interaction, inadequate illumination, etc.).

Safety issue	An issue that encompasses one or more contributing factors and/or other unsafe conditions.
Safety deficiency	A safety issue with risks for which existing defences aimed at preventing an accident event, and/or those aimed at eliminating or reducing its consequences, are assessed to be either inadequate or missing.

The following diagram illustrates how a sequence of events leading to a casualty occurrence would be classified using the above terms.



3 QUALIFICATIONS AND TRAINING OF INVESTIGATORS

3.1 To achieve a systematic and effective safety investigation the appointed investigators need to have expertise in marine casualty investigation and be knowledgeable in matters relating to the marine casualty or incident. Areas of expertise need to include evidence collection techniques, interview techniques, analysis techniques and the identification of human and organizational factors in marine casualties and incidents.

3.2 All investigators attending a marine casualty site should have sufficient knowledge in personal safety, taking particular note that the hazards present at a casualty site may well be beyond those encountered in normal ship operations.

3.3 A Marine Safety Investigation Authority should consider developing a formal training programme to ensure that its investigators acquire the necessary knowledge, understanding and proficiency in marine safety investigation.

4 NOTIFICATION AND COOPERATION

4.1 Notification of a marine casualty or incident is to be provided to all affected parties as soon as reasonably practicable. Notification includes informing the parties involved in the casualty or incident according to chapter 20 of the Code, as well as any substantially interested State in accordance with chapter 5 of the Code. Notification should preferably be in a format that ensures a prompt acknowledgement from the addressee.

4.2 If the casualty or incident involves substantial interests of more than one State, the States should quickly reach an agreement on cooperation in accordance with chapter 7 of the Code. This agreement may include, but not be limited to:

- .1 ensuring that the objectives of each participating State is in accordance with the IMO Casualty Investigation Code;
- .2 which State will lead the investigation;
- .3 the possibilities to share casualty information, and draft safety investigation reports in accordance with chapter 13 of the Code, with regard to national legislation on confidentiality as well as the potential risk of safety investigation findings being used in criminal and civil lawsuits; and
- .4 distribution of costs related to the investigation.

4.3 If an agreement in accordance with the Code, chapter 7, cannot be made, the involved States should seek to share factual information to the greatest extent possible, being guided by the recommended practice in the Code.

5 INVESTIGATION

5.1 Extent of investigation

5.1.1 Marine casualties and incidents can have many causal factors and the underlying safety issues often exist remote from the casualty site. Proper identification of such issues requires timely and methodical investigation, going far beyond the immediate evidence in search for conditions which may cause future occurrences. Marine casualty or incident safety investigations should therefore be seen as a means of identifying not only the accident events, but also safety deficiencies in the overall management of the operation from policy through to its implementation, as well as in regulation, survey and inspection. For this reason safety investigations should be broad enough to meet these overriding criteria.

5.1.2 The extent of any safety investigation can be divided into five areas:

- .1 people;
- .2 environment;
- .3 equipment;
- .4 processes and procedures; and
- .5 organization and external influences.

5.2 Initial response

5.2.1 An investigation should be carried out as soon as possible after an occurrence so as to limit the loss of perishable evidence including the degradation of witness memory. To be

able to start promptly it is essential that the investigating State has a preparedness plan in place which among other things, will facilitate:

- .1 the ready availability of trained investigators;
- .2 the availability of specialist help, including human and organizational factors experts;
- .3 ready access to 24-hour contact points for other Marine Safety Investigation Authorities; and
- .4 the availability of the necessary predictable resources.

5.3 Site management

5.3.1 Site management generally starts even before the investigator deploys to the casualty site. The pre-planning will often need to include:

- .1 identification of competencies needed at the casualty site;
- .2 identification of hazards and risks that the team may encounter at the casualty site, and the precautions that need to be taken, as well as the personal protective equipment (PPE) that needs to be carried;
- .3 identification of particularly vulnerable evidence that needs to be secured as soon as possible including VDR information, documentation of sites that for some reasons cannot be left unchanged until the team arrives, and repatriation of crew members; and
- .4 a draft interview schedule taking into account repatriation of seamen as well as the fact that persons involved can suffer from trauma.

5.3.2 There can be many different stakeholders involved in the aftermath of a marine casualty or incident, each with their own legitimate interests and responsibilities. Coordination at the casualty site is vital to make the evidence collection successful.

5.3.3 When arriving at the casualty site the hazard and risk assessment should be reviewed to identify any additional risks for the team and to put in place any necessary remedial action before the team starts its work.

5.4 Start-up meeting

5.4.1 In safety investigations involving more than one State it is generally wise to set up a meeting with representatives of the other substantially interested States at an early stage. The purpose of the start-up meeting is, among other things, to facilitate:

- .1 the sharing of knowledge of what is known about the marine casualty or incident;
- .2 the development of an investigation plan;
- .3 the delegation of investigation tasks (international coordination); and
- .4 the identification of additional help in the form of specialists and/or technical expert examination.

5.5 Collection of evidence

5.5.1 During the safety investigation, investigators should aim to gather and record all the evidence and factual data which may be of interest within the scope of the investigation. Physical and documentary evidence and witness statements should be gathered not only at the casualty site, but from all sources required to fully explain the accident events and their contributing factors to the accident (e.g. operation, management, inspection and regulation).

5.5.2 Evidence collection also needs to be broad enough to cover the human, organizational and environmental factors in relation to the casualty or incident. If a human and organizational factor specialist is required, it is essential to include this expert as early as possible in the investigation team.

5.5.3 To facilitate a comprehensive evidence collection it is often wise to:

- .1 refer to generic checklists but remain flexible as evidence once collected will often point out new areas of inquiry; and
- .2 use a system to register the evidence collected (Evidence log). This is particularly valuable in complex investigations or when more than one State is involved.

5.5.4 It is recommended that the fact-finding stage of the investigation process itself be kept separate from the complete analysis of the collected evidence leading to conclusions and recommendations. Fact finding usually includes, but is not necessarily limited to the areas covered in paragraphs 5.6-5.10.

5.6 Inspection of casualty site

5.6.1 Inspection and documentation of the casualty site and/or places of interest for the investigation can include inspection of the ship/ships involved, a fairway where the casualty or incident occurred, and underwater survey and filming of the wreckage of a ship.

5.6.2 The collection of evidence that can deteriorate or disappear over time will always be the first priority in evidence collection when the investigator(s) arrives at the casualty site. Photo and/or video documentation of the site in general and in detail, and before any removal of evidence, is generally also of a high priority.

5.6.3 Where there is perishable evidence and the investigator(s) may be delayed in arriving at the casualty site, there may be a need to give instructions for the evidence to be preserved.

5.7 Gathering or recording physical evidence

5.7.1 Physical evidence can include data from VDR and other electronic devices on board like electronic charting systems, central fire alarm units, as well as nautical charts, weather forecasts obtained on board, and logbooks. Physical evidence can also include technical samples of oil, paint, or fire residues, and pieces of broken machinery or other broken parts.

5.7.2 It is essential that the person who collects electronic, documentary or material evidence is skilled in applicable techniques for both collection and storage of that type of evidence to prevent contamination, further deterioration or loss.

5.7.3 Some information of great value can also be obtained from external sources such as CCTV, shore radar and radio surveillance systems and Marine Rescue Coordination Centres. VTS centres may also be able to provide valuable information, including recordings of radio traffic and AIS information.

5.8 Witness information

5.8.1 Witness interviews should be performed by persons skilled in interviewing techniques to reveal information the witness may be able to provide. The planning of the interview is essential for a successful outcome. Things to be considered include:

- .1 time and location;
- .2 any need of interpreters;
- .3 make-up of the interview team and the roles of the team members;
- .4 the particular needs of the witness; and
- .5 the topic areas to be explored with the witness.

5.8.2 The interviewed person should be informed, before the interview starts, about the purpose of the investigation and the conditions under which he/she will be providing information. The witness should generally be interviewed singly, or accompanied by someone nominated by the witness. The nominated individual should, however, not be allowed to interfere with the interview. The witness should under all circumstances be allowed access to legal advice if he/she wants it (see IMO Casualty Investigation Code, chapter 12).

5.8.3 The interview might be recorded or a written record could be made of the interview. A written record should be discussed with the witness to clarify any anomalies. Witness information should be verified wherever possible. Statements made by different witnesses may conflict and further supporting evidence may be needed.

5.9 Reviewing of documents, procedures and records

5.9.1 Documents to be reviewed can include personal and ship-related certificates, reports from the ship's classification society, maintenance records, the Master's standing orders, etc. An assessment may also be made of the company's Safety Management System from its safety policy through to its implementation within the organization.

5.9.2 Government agencies, such as customs, quarantine and State Authorities may have useful information relating to crew lists, the general condition of the ship, ship certificates, etc. Coroners and medical records can provide valuable information. Port authorities and independent surveyors can also hold information of use to an investigation. Applicable regulations may also need to be examined.

5.9.3 A good investigation explores the extent of correlation between the documents and reality at all appropriate levels: this will generally require some specialist skills.

5.10 Conducting specialized studies (as required)

5.10.1 It can sometimes be necessary to conduct specialized studies to establish how a casualty or incident happened. This can include, for example, metallurgic specialist studies of broken machinery parts, analysis of oil or paint residues, calculation and reconstruction of a

ship's stability features, lashing calculations, specialist analysis of weather and sea conditions at the time and place of the casualty or incident, and the use of simulators to reconstruct and analyse a sequence of events.

5.10.2 Where a proposed testing of physical evidence is likely to change its state, other interested parties who may be relying on that evidence should be consulted.

5.11 Reconstruction and analysis

5.11.1 There are several different methods of organizing evidence to support reconstruction and analysis in safety investigation, each having its own benefits and drawbacks. To ensure that a casualty or incident is thoroughly examined from a safety point of view, it is essential that the investigation is done with a systemic perspective. A systemic perspective involves going beyond determining "who did what?" and to look for the conditions that influenced different relevant events, even when these conditions are to be found remote from the casualty site. A systemic perspective also puts human factors into context and includes the interactions between man, machine and the organization.

5.11.2 The analysis methods used will help the investigator to think in a structured way but will also have an effect on where the investigator will put his/her focus. Some methods focus on human factors; some support the understanding of the sequence of events; others are more supportive in complex safety analysis or in understanding technical failures. Analysis methods should therefore rather be seen as tools in a tool box. A good investigation will choose the optimal set of analysis tools to meet the characteristics of that particular casualty or incident. However, the method or the combination of methods used in each investigation should as a minimum requirement support:

- .1 reconstruction of the casualty or incident as a sequence of events;
- .2 identification of linked accident events and contributing factors at all appropriate levels; and
- .3 safety analysis and development of recommendations.

5.12 Reconstruction of the casualty events and their linked conditions

5.12.1 The first step in analysis is to review the factual information to clarify what is relevant and what is not, and to ensure the information is as complete as possible or practicable. This stage of the analysis should aim at determining how the marine casualty or incident occurred. The reconstruction is preferably done by using a method that enables a graphical description of the sequence of events. This is beneficial since it allows the investigator to discuss and present the case, and in particular to:

- .1 identify gaps in the information;
- .2 identify any conflicts in evidence;
- .3 provide a graphical description of how different events are related; and
- .4 identify contributing factors and their relation to different accident events.

5.12.2 Marine casualty or incident investigation is an iterative process and the reconstruction phase generally identifies a need to make a revision of the evidence collection plan.

5.13 Safety analysis

5.13.1 The purpose of a safety analysis is to get a more thorough understanding of the underlying safety issues that can cause or contribute to a casualty or incident. Some investigation analysis methods combine casualty reconstruction and safety analysis into one. Some basic analysis methods can be directly linked to the reconstruction of events, while other safety analysis tools can be derived from different accident causational models and are better used as stand-alone methods. Efficient safety analysis tools:

- .1 encourage different perspectives of casualty or incident causation;
- .2 support communication and deeper questioning;
- .3 enable the identification of safety issues and safety deficiencies, including those remote from the casualty site; and
- .4 enhance the development of effective remedial actions at all appropriate levels.

6 REPORTING

6.1 Reporting requirements

6.1.1 MSC-MEPC.3/Circ.[4] requires particular marine casualty data to be entered into the GISIS marine casualties and incidents module, together with the final version of a marine safety investigation report.

6.2 Final report

6.2.1 To facilitate the flow of information, the final report of the safety investigation should be well structured and cover what is listed in chapter 2.2.12 of the Code. The report should, within its different parts, clearly distinguish between facts and analysis.

6.2.2 The singleness of purpose to enhance maritime safety and protection of the marine environment should be reflected in the non-judgmental language used in the report. Witnesses' names and personal information which may identify them should remain confidential.

6.2.3 In normal investigation practice, gaps in information that cannot be resolved are usually filled by logical extrapolation and reasonable assumptions. Such extrapolation and assumptions should be identified and a statement of the measure of certainty provided. Despite best efforts, analysis may not lead to firm conclusions. In these cases, the more likely hypotheses should be presented.

6.2.4 If safety recommendations are issued these should be addressed to those that are best placed to implement them, such as shipowners, managers, recognized organizations, maritime authorities, vessel traffic services, emergency bodies, and international and regional maritime organizations and institutions. Safety recommendations should always be supported by the facts and analysis of the safety investigation. To gain acceptance, recommendations need to be practical, necessary and likely to be effective.

6.2.5 Where it becomes apparent during an investigation that there is a safety deficiency that presents a serious potential risk to lives, ships or the environment, action should be taken to inform the people or organization responsible for managing the risk. This may take

the form of an interim safety recommendation or some other means of correspondence. It is important not to delay action to address such safety risks until the completion of the investigation.

6.3 Consultation

6.3.1 In accordance with sections 25.2 and 25.3 of the Code, where it is practicable, the investigator should send a copy of a draft marine safety investigation report for comment to the interested parties as defined in section 2.2.7 of the Code. This allows a process for correcting matters of fact within a report and the consideration of alternative hypotheses or opinions in relation to the analysis. In addition, it allows responsible parties, e.g. the ship operator, to indicate what safety action may have been taken in relation to a safety issue. Any such action taken should be included in the final report.

6.3.2 The investigator should consider the comments before preparing the final marine safety investigation report, being guided by section 25.3 of the Code.

6.4 Publication

6.4.1 The final report should be made available to the public and the shipping industry in accordance with section 14.4 of the Code. The Internet is a valuable tool for making a report available to the public.

6.4.2 A summary of the marine safety investigation report and any safety recommendations, translated into English and/or other major languages, will enable a global public to gain important safety information from the investigation.

6.5 Follow-up on safety recommendations

6.5.1 Every recommendation addressed to an individual or specific organization should be followed up within a reasonable period following the release of a final safety investigation report with a view to promoting safety action. It is also good practice to reinforce positive safety action to address a recommendation by making it public. Similarly, the fact that no action has been taken by those responsible for implementing a recommendation should also be published.

* * *

Appendix 1

AREAS OF HUMAN AND ORGANIZATIONAL FACTORS INQUIRY

The areas of inquiry set out in this appendix can be used in planning the investigation of human and organizational factors during a maritime safety investigation. Some areas of inquiry overlap or indeed incorporate multiple interactions. The guidance is not meant to be exhaustive, nor is it intended to be a checklist where each point must be investigated every time. Some areas may not be relevant in the investigation of a particular occurrence, while other areas may require deeper investigation. As new human and organizational factors/issues emerge, new areas of inquiry will need to be explored by investigators.

Skilful interviewing can help the investigator eliminate irrelevant lines of inquiry and focus on areas of greater potential significance. The order and manner in which questions are asked will depend on who is being interviewed and on his or her willingness and ability to recall and describe personal behaviour and personal impressions. Training in cognitive interviewing techniques will assist investigators in eliciting accurate information from interviewees, and is highly recommended. Further, because human interactions, including interviews, are subject to misunderstanding, it will normally be necessary to verify, cross-check or augment information received from one person by interviewing others on the same subjects.

While important human and organizational factors/information can be gained through interview, investigators must ensure that they also seek additional information through other means. Examination of rosters, procedures, personnel records, safety occurrence reporting records and risk assessment protocols (for example) may provide critical insights into practices, norms and attitudes potentially affecting safety.

SHIPBOARD ISSUES

1 Training and experience

- Position or rank held.
- Certificate held; length of time the certificate has been held; where trained.
- Experience in the position; both on this ship and over career.
- Length of time on this contract and overall on board the ship.
- Experience on other ships; both with this company and other companies.

2 Shipboard organizational structure and processes

- The management/department structure on board the ship.
- The individual's position within the on board structure; who they work for, who they work with, who they report to and who they assign duties to.
- Normal day-to-day responsibilities, tasks and duties.
- Description of any interworking with personnel ashore.

3 Nature of tasks

- Specifics of the task(s) being undertaken at the time of the occurrence, including location.
- Differences between the task at that time and normal operations.
- Description of the social dynamics of the working environment (e.g. alone/pair/team).
- Understanding of the task.
- Familiarity with the task; last time it was performed, etc.
- Available discretion relating to how the task was to be accomplished.
- Training provided for the task; what was the training.
- Procedures, documents and guidance for the task.
- Equipment used for the task; reliability, previous failures, problems and were the crew familiar with it.
- Physical environment; heat, humidity, noise, confined space, exposure to chemicals, etc.
- Workload and/or effort required for the task:
 - To what extent was it within their capability at the time.
 - Were there any tasks that they did not do because of the workload on this task.
 - Physical effort involved; pushing, pulling, lifting, etc.
 - Mental effort involved; thinking, deciding, calculating, remembering, looking, searching, etc.
 - Time pressure involved; adequacy of time allocated to the task.
 - Use of scaling questions may assist here. (e.g. "on a scale of 1 to 10, where 1 is very easy and 10 is extremely difficult, how (physically) difficult was this task ...").

4 Activities prior to occurrence

- Actions and/or activities before coming on watch or reporting for duty.
- Individual's role in the operation being conducted by the ship at the time of the occurrence.
- Individual's location on board at the time of the occurrence.
- What was being observed immediately prior to the occurrence; what was seen, heard, felt, smelled, and thought about.

5 Work-period/rest-period/recreation pattern

- Description of normal duty schedule (e.g. day worker or watchkeeper).
- Description of duty schedule on the day of the occurrence; the day before and during the week before the occurrence.
- Length of time awake and/or on duty at the time of the occurrence.
- Overtime worked on the day of the occurrence; the day before and during the week before the occurrence.
- Usual sleep/rest routine (What time to sleep and awake).
- Sleep/rest routine in the three days (72 hours minimum) leading up to the occurrence:
 - 72-hour history of time to bed/time to sleep/duty times/nap times.
 - If there is an indication of reduced sleep beyond 72 hours, collect sleep information beyond 72 hours (as a guide, back to two good nights' rest prior to the occurrence).
 - Quality of sleep; disturbances, light sleep, waking, how refreshed when waking.
 - Time of day when sleep is taken (impact on quality).
 - Last extended period of off-duty time.

6 Living conditions and shipboard environment

- Description of the adequacy of personal facilities; individual, shared or communal; noisy, cramped, vibrations, temperature, ship's motion, etc.
- Availability and consumption of alcohol and/or non-prescribed medications.

7 Physical health

- Symptoms of illness experienced within the 72 hours before the occurrence.
- Medications taken (prescription, non-prescription).
- Description of the last meal consumed prior to the occurrence; what and when.
- Description of existence and regularity of exercise routine.
- Details of any recent medical examinations, illnesses or injuries.
- Details of any regular or irregular medication, both prescribed and non-prescribed.
- Description of quality of vision (corrective lenses, etc.).
- Description of quality of hearing (hearing aids, etc.).
- Name and contact details of personal physician.

8 Mental health

- Length of time spent away from family or loved ones.
- Extreme emotions at any time in the days before the occurrence; e.g. feelings of extreme sadness, anger, worry, fear (use scaling questions (1 to 10) to determine level).
- Important and/or difficult personal decisions made recently; e.g. financial or family worries.
- Recent work performance; any concerns from others.
- Stress and/or difficult situations whilst on board and how these were being managed.
- Difficulties with concentration.
- Any mental health issues recently and/or in the past.
- Medications taken (prescription, non-prescription).

9 Working relationships

- Friendships and/or support from other crew members.
- Conflicts and/or clashes with other crew members or supervisors.
- Trust in other crew members.
- Language barriers interfering with work performance.
- Clarity of roles and responsibilities with other crew members.

10 Employment conditions

- Contractual arrangements.
- Complaints or industrial action and systems for resolution of these.
- Recent changes to employment conditions.

11 Safety policy

- Awareness of the company's safety policy.
- Ship's procedures for dealing with safety issues; methods of reporting and addressing safety concerns.
- Safety training; type, nature and frequency.
- Emergency drills; type, nature of and frequency.
- Personal protective equipment (PPE) provided.
- Records and/or knowledge of personal accidents or injuries prior to the occurrence.

12 Staffing levels

- Sufficiency of staffing/crew levels on board.
- Appropriate allocation of crew members to duties.
- Changes to normal staffing/crew levels.

13 Standing orders

- Master's standing orders; for all or part of the crew.
- How are the orders communicated.
- Are the orders in accordance with the company policies.

14 Level of automation and reliability of equipment

- Complexity of machinery and automated systems.
- Training provided for systems.
- Competency of crew in using the systems.
- Reliability of systems; any earlier failures.
- Maintenance of systems.
- Are the systems integrated with each other and the task needs.

15 Ship design, motion/cargo characteristics

- Ship design, motion or cargo characteristics; any features which interfere with human performance (e.g. obstructed watchkeeper vision).

SHORESIDE MANAGEMENT ISSUES

16 Management policies and procedures

- Existence and opinion of the effectiveness of the safety management system, **including auditing, analysis, reporting and occurrence investigation.**
- Existence and opinion of the effectiveness of risk assessment and management policies and procedures relating to ships, personnel and the environment.
- Existence and opinion of the effectiveness of the role of the Designated Person Ashore (DPA).

17 Scheduling of work and rest periods

- The company's work schedule, relief policy and fatigue risk management policy.
- Adherence to these policies.
- Recent changes to these policies.

18 Staffing levels

- The company's policies and practices for determining staffing/crew levels on board ships.
- The effectiveness of these policies and practices.

19 Assignment of duties

- The company's policies for determining watchkeeping practices and other duties on board the ship.
- The actual watchkeeping practices.

20 Shore-ship-shore support and communications

- Means and level of support for the ship's master in conduct of operations.
- The master's reporting requirements.

21 Voyage planning and port call schedules

- Policies, procedures and guidelines provided to the master to enable voyage planning
- Actual practices for voyage planning.

22 Recreational facilities

- The company's policies and practices for the provision of welfare and recreational services on board.

23 Contractual and/or industrial arrangements and agreements

- Contractual arrangements for all crew members.
- Complaints or industrial action in the last year.

24 National/international requirements

- Appropriateness of the applicable international conventions and flag State regulations.
- Effectiveness of the flag State's implementation of the requirements and recommendations of the applicable international conventions.
- Compliance with the requirements and recommendations of the applicable international conventions and flag State regulations.

ANNEX 34

DRAFT ASSEMBLY RESOLUTION

**AMENDMENTS TO THE SURVEY GUIDELINES UNDER THE HARMONIZED
SYSTEM OF SURVEY AND CERTIFICATION (HSSC), 2011**

THE ASSEMBLY,

RECALLING Article 15(j) of the Convention on the International Maritime Organization concerning the functions of the Assembly in relation to regulations and guidelines regarding maritime safety and the prevention and control of marine pollution from ships,

RECALLING ALSO the adoption by:

- (a) the International Conference on the Harmonized System of Survey and Certification, 1988, of the Protocol of 1988 relating to the International Convention for the Safety of Life at Sea, 1974 and of the Protocol of 1988 relating to the International Convention on Load Lines, 1966, which, inter alia, introduced the harmonized system of survey and certification into the International Convention for the Safety of Life at Sea, 1974 and the International Convention on Load Lines, 1966, respectively;
- (b) resolution MEPC.39(29) of amendments to introduce the harmonized system of survey and certification into the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the 1978 Protocol relating thereto (MARPOL);
- (c) resolution MEPC.132(53) of amendments to introduce the harmonized system of survey and certification into MARPOL Annex VI; and
- (d) the resolutions given below of amendments to introduce the harmonized system of survey and certification into:
 - (i) the *International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code)* (resolutions MEPC.40(29) and MSC.16(58));
 - (ii) the *International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code)* (resolution MSC.17(58)); and
 - (iii) the *Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (BCH Code)* (resolutions MEPC.41(29) and MSC.18(58)),

RECALLING ALSO that, by resolution A.1053(27), it adopted the *Survey Guidelines under the Harmonized System of Survey and Certification (HSSC), 2011* (hereinafter referred to as "the Survey Guidelines") with a view to assisting Governments in implementing the requirements of the aforementioned instruments,

RECOGNIZING the need for the Survey Guidelines to be further revised to take account of the amendments to the IMO instruments referred to above, which have entered into force or become effective since the adoption of resolution A.1053(27),

HAVING CONSIDERED the recommendations made by the Marine Environment Protection Committee, at its [sixty-fifth] session, and the Maritime Safety Committee, at its [ninety-second] session,

1. ADOPTS the amendments to the *Survey Guidelines under the Harmonized System of Survey and Certification (HSSC), 2011*, as set out in the annex to the present resolution;
2. INVITES Governments carrying out surveys required by the relevant IMO instruments to apply the provisions of the annexed Survey Guidelines;
3. REQUESTS the Maritime Safety Committee and the Marine Environment Protection Committee to keep the Survey Guidelines under review and amend them as necessary.

* * *

ANNEX

**AMENDMENTS TO THE SURVEY GUIDELINES UNDER
THE HARMONIZED SYSTEM OF SURVEY AND CERTIFICATION, 2011
(RESOLUTION A.1053(27))**

Note: The struck-out text indicates deletions and the underlined text shows additions or changes to the Survey Guidelines.

1 Amendments to General – 1 Introduction:

1.2 These Guidelines take into account amendments to statutory instruments which have entered into force up to and including 31 December ~~2011~~2013 (see appendix 1) and contain the following:

2 Amendments to General – 3 Application and Arrangement of the Guidelines

3.4 When appropriate, the detailed requirements for the various surveys contain a section that is applicable to all cargo ships followed by a section that only applies to ~~oil tankers~~specific ship types.

3.8bis For the application of these Guidelines, the following guidance on terms used in the survey requirements is provided:

.1 "Examining" except where used in "examining the plans" or "examining the design" should be understood as a thorough examination, using appropriate techniques, of the components, system or appliance in question for satisfactory provision, arrangement and condition and for any signs of defects, deterioration or damage;

.2 "Testing" should be understood as a functional test of the system or appliance in question, to confirm its satisfactory operation and performance for its intended use.

3 Amendments to annex 1 - Survey Guidelines under the 1974 SOLAS Convention as modified by the 1988 Protocol relating thereto – (E) 1 Guidelines for Surveys for the Cargo Ship Safety Equipment Certificate:

(EI) 1.1.1.1 examining the plans for the fire pumps including the emergency fire pump¹, if applicable, fire mains, hydrants, hoses and nozzles and the international shore connection (SOLAS 74/00 regs.II-2/10.2 and 10.4.4 and FSSC chs.2 and 12)

(EI) 1.1.1.6 checking the provision of a fixed fire detection and fire alarm system for machinery spaces including periodically unattended machinery spaces and enclosed spaces containing incinerators (SOLAS 74/00/10 regs.II-2/7.2, 7.3 and 7.4; FSSC ch. 9) (SOLAS 74/88 regs.II-2/13 and 14);

¹ Refer to the unified interpretation of chapter 12 of the FSS Code, MSC.1/Circ.1388.

- (EI) 1.1.1.14 examining the plans for the special arrangements for the carriage of dangerous goods, when appropriate, including water supplies, electrical equipment and wiring, fire detection including sample extraction smoke detection systems, where applicable, ventilation, bilge pumping, personnel protection and any water spray system (SOLAS 74/00 reg.II-2/19 (except 19.3.8, 19.3.10 and 19.4); FSSC chs.9 and 10) (SOLAS 74/88 reg.II-2/54);
- (EI) 1.1.1.16 examining, where applicable, the approved documentation for the alternative design and arrangements (SOLAS 00/06 regs. II-2/17 and III/38);
- (EI) 1.1.1.17 examining the design of the survival craft, including their construction equipment, fittings, release mechanisms launching and recovery appliances and embarkation and launching arrangements (SOLAS 74/96/06/11 regs.III/ 4,16, 31, 32 to 33; LSAC sections. 3.2, 4.1 to 4.9, 6.1 and 6.2);
- (EI) 1.1.1.30 checking the plans provision and specification of for the pilot transfer arrangement, the pilot ladders, the combination arrangements, where applicable, the access to the ship's deck and the associated equipment and lighting and hoists/pilot transfer arrangements(SOLAS 74/88/10 reg.V/23);
- (EI) 1.1.2 For the examination of plans and designs of the life-saving appliances and the other equipment of cargo ships the additional requirements for oil-tankers should consist of:
- (EI) 1.1.2.1 examining the plans for the cargo tank protection (SOLAS 74/00 regs.II-2/4.5.3, 4.5.5, 4.5.6, ~~4.5.7~~ and 10.8; FSSC chs.14 and 15) (SOLAS 74/88 regs.II-2/60 and 62); and
- (EI) 1.1.2.1bis examining the plans for gas measurement in double-hull spaces and double bottom spaces, including the fitting of permanent gas sampling lines, where appropriate (SOLAS 10 reg.II-2/4.5.7.2)
- (EI) 1.1.2.1ter examining, for oil tankers of 20,000 tonnes deadweight and above, the plans for the fixed hydrocarbon gas detection system for measuring hydrocarbon gas concentrations in all ballast tanks and void spaces of double-hull and double-bottom spaces adjacent to the cargo tanks, including the forepeak tank and any other tanks and spaces under the bulkhead deck adjacent to cargo tanks (SOLAS 10 reg.II-2/4.5.7.3 and FSSC ch.16);
- (EI) 1.1.3.1 examining the fire pumps and fire main and the disposition of the hydrants, hoses and nozzles and the international shore connection and checking that each fire pump, including the emergency fire pump, can be operated separately so that two jets of water are produced simultaneously from different hydrants at any part of the ship whilst the required pressure is maintained in the fire main; and testing that the emergency fire pump has the required capacity, and if the emergency fire pump is the main supply of water for any fixed fire-extinguishing system, checking that that the emergency fire pump has the capacity

- for this system¹ (SOLAS 74/00 reg.II-2/10.2; FSSC chs.2 and 12) (SOLAS 74/88 regs.II-2/4 and 19);
- (EI) 1.1.3.8 examining any fire detection and alarm system and any automatic sprinkler, fire detection and fire alarm system, and any sample extraction smoke detection system and confirming that installation tests have been satisfactorily completed (SOLAS 74/00/10 regs.II-2/7.2, 7.3, 7.4, 7.5.1, 7.5.5, 19.3.3 and 20.4; FSSC chs.9 and 10) (SOLAS 74/88 regs.II-2/11, 13, 14, 53 and 54);
- (EI) 1.1.3.11bis examining, where applicable, the alternative design and arrangements for fire safety or life-saving appliances and arrangements, in accordance with the test and inspection requirements, if any, specified in the approved documentation (SOLAS 00/06 regs. II-2/17 and III/38);
- (EI) 1.1.3.35 checking the provision of the pilot transfer arrangement, the access to the ship's deck and the associated equipment and lighting, checking the and, as appropriate, the deployment or operation of the pilot ladders and hoists/pilot transfer the combination arrangements (SOLAS 74/00/10 reg.V/23);
- (EI) 1.1.4 For the life-saving appliances and the other equipment of cargo ships for the additional requirements for ~~oil~~ tankers the survey during construction and after installation should consist of:
- (EI) 1.1.4.5 examining, for all tankers, the arrangements for cargo tank protection, (SOLAS 74/00/10 regs. II-2/4.5.3, 4.5.6, and 10.8; FSSC chs. 14 and 15) (SOLAS 74/88 regs II-2/60 and 62);
- (EI) 1.1.4.6 checking, for all tankers, the provision of at least one portable instrument for measuring oxygen and one for measuring flammable vapour concentrations, together with a sufficient set of spares, and suitable means for the calibration of these instruments (SOLAS 10 reg. II-2/4.5.7.1);
- (EI) 1.1.4.7 examining the arrangements for gas measurement in double-hull spaces and double bottom spaces, including the fitting of permanent gas sampling lines, where appropriate (SOLAS 10 reg. II-2/4.5.7.2)
- (EI) 1.1.4.8 examining, for oil tankers of 20,000 tonnes deadweight and above, the fixed hydrocarbon gas detection system for measuring hydrocarbon gas concentrations in all ballast tanks and void spaces of double-hull and double-bottom spaces adjacent to the cargo tanks, including the forepeak tank and any other tanks and spaces under the bulkhead deck adjacent to cargo tanks, and confirming that the installation tests have been satisfactorily completed (SOLAS 10 reg. II-2/4.5.7.3 and FSSC ch.16);
- (EI) 1.1.5.3bis confirming that, where applicable, the approved documentation for the alternative design and arrangement is on board (SOLAS 00/06 regs.II-2/17 and III/38);
- (EI) 1.1.5.9bis checking that records are provided, identifying any pilot ladders placed into service (SOLAS 10 reg.V/23.2.4);

- (EI) 1.1.5.11 checking that the International Code of Signals and an up-to-date copy of Volume III of the International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual have been provided. (SOLAS 74/00/02 reg.V/21);
- (EI) 1.1.6 For the life-saving appliances and the other equipment of cargo ships, concerning the additional requirements for oil-tankers the check that the required documentation has been placed on board should consist of:
- (EI) 1.1.6.2 confirming that the operating and maintenance instructions for the fixed hydrocarbon gas detection system are provided (SOLAS 10 reg. II-2/4.5.7.3 and FSSC ch. 16),
- (EA) 1.2.1.11**bis** confirming when appropriate, the validity of the International Energy Efficiency Certificate (MARPOL Annex VI reg.6.4 and 6.5);
- (EA) 1.2.1.15 confirming that, where applicable, the approved documentation for the alternative design and arrangements is on board (SOLAS 00/06 regs. II-2/17 and III/38);
- (EA) 1.2.1.23**bis** confirming that, where applicable, a factual statement has been provided onboard by the lifeboat release and retrieval system manufacturer or one of their representatives, that confirms the successful completion of the overhaul examination of an existing lifeboat release and retrieval system found to be compliant with paragraphs 4.4.7.6.4 to 4.4.7.6.6 of the LSA Code, or, alternatively, that a statement of acceptance of the installation of a replacement release and retrieval system to an existing lifeboat is available (SOLAS 11 reg. III/1.5; LSAC section 4.4.7.6)
- (EA) 1.2.1.30 checking that the International Code of Signals and an up-to-date copy of Volume III of the International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual have been provided. (SOLAS 74/00/02 reg.V/21);
- (EA) 1.2.1.30**bis** checking that records are maintained identifying any pilot ladders placed into service and any repair effected (SOLAS 10 reg. V/23.2.4);
- (EA) 1.2.1.32 checking that records of navigational activities and daily reporting have been maintained (SOLAS 74/00/04-03 reg.V/28);
- (EA) 1.2.2.8 examining, as far as possible, and testing, as feasible, any fire detection and alarm system and any sample extraction smoke detection system (SOLAS 74/00/10 regs.II-2/7.2, 7.3, 7.4, 7.5.1, 7.5.5, 19.3.3 and 20.4; FSSC chs.9 and 10) (SOLAS 74/88 regs.II-2/11, 13, 14, 53 and 54);
- (EA) 1.2.2.13**bis** examining, where applicable, the alternative design and arrangements for fire safety or life-saving appliances and arrangements, in accordance with the test, inspection and maintenance requirements, if any, specified in the approved documentation (SOLAS 00/06 regs. II-2/17 and III/38);
- (EA) 1.2.2.17 examining each survival craft, including its equipment and, when fitted, the on-load release mechanism and hydrostatic lock and, for inflatable liferafts, the hydrostatic release unit and float-free arrangements.

- Checking that the hand-held flares are not out of date (SOLAS 74/00 regs.III/16, 20 and 31; LSAC sections 2.5, 3.1 to 3.3, 4.1.5, 4.4.7 and 4.4.8);
- (EA) 1.2.2.35 ~~checking the provision, and operation and the annual test has been carried out for~~ of the automatic identification system, where fitted, and whether the annual test has been carried out and a copy of the test report is on board (SOLAS 74/00/04/10 regs.V/18.9 and 19);
- (EA) 1.2.2.37 checking the provision and specification of the pilot ladders and ~~hoists~~/pilot transfer arrangements (SOLAS 74/00/10 reg.V/23);
- (EA) 1.2.3 For the life-saving appliances and the other equipment of cargo ships, concerning the additional requirements for ~~oil~~-tankers the annual survey should consist of:
- ~~(EA) 1.2.3.4bis~~ checking for all tankers, the provision of at least one portable instrument for measuring oxygen and one for measuring flammable vapour concentrations, together with a sufficient set of spares, and suitable means for the calibration of these instruments (SOLAS 10 reg. II-2/4.5.7.1);
- ~~(EA) 1.2.3.4ter~~ examining the arrangements for gas measurement in double-hull spaces and double bottom spaces, including the fitting of permanent gas sampling lines, where appropriate (SOLAS 10 reg. II-2/4.5.7.2)
- ~~(EA) 1.2.3.4quad~~ examining, as far as possible and testing the fixed hydrocarbon gas detection system (SOLAS 10 reg. II-2/4.5.7.3 and FSSC ch. 16);
- (EP) 1.3.2.4 testing any fire detection and alarm system and any sample extraction smoke detection system (SOLAS 74/00/10 regs.II-2/7.2, 7.3, 7.4, 7.5.5, 19.3.3 and 20.4; FSSC chs.9 and 10) (SOLAS 74/88 regs.II-2/11, 13, 14, 53 and 54);
- (EP) 1.3.3 for the life-saving appliances and the other equipment for the additional requirements for ~~oil~~-tankers the periodical survey should consist of:
- (ER) 1.4.3 for the life-saving appliances and the other equipment of cargo ships, concerning the additional requirements for ~~oil~~-tankers the renewal survey should consist of:

4 Amendments to annex 1 - Survey Guidelines under the 1974 SOLAS Convention as modified by the 1988 Protocol relating thereto – (C) 2 Guidelines for Surveys for the Cargo Ship Safety Construction Certificate:

- ~~(CI) 2.1.1.1bis~~ examining plans to verify that bulk carriers of 150 m in length and above, where appropriate, meet the applicable structural requirements of an organization recognized by the Administration, or national standards of the Administration, conforming to the functional requirements of the Goal-based Ship Construction Standards for Bulk Carriers and Oil Tankers (SOLAS 10 reg. II-1/3-10);

- (CI) 2.1.1.6 examining, where applicable, the approved documentation for the alternative design and arrangements (SOLAS 00/06 regs.II-1/55 and II-2/17);
- (CI) 2.1.2.8 examining plans to verify that oil tankers of 150 m in length and above, where appropriate, meet the applicable structural requirements of an organization recognized by the Administration, conforming to the functional requirements of the Goal-based Ship Construction Standards for Bulk Carriers and Oil Tankers (SOLAS 10 reg.II-1/3-10);
- (CI) 2.1.3.1bis confirming in accordance with the survey plan, that bulk carriers of 150 m in length and above, where appropriate, meet the applicable structural requirements of an organization recognized by the Administration, or national standards of the Administration, conforming to the functional requirements of the Goal-based Ship Construction Standards for Bulk Carriers and Oil Tankers (SOLAS 10 reg. II-1/3.10);
- (CI) 2.1.3.17 confirming and recording the ability of the machinery to reverse the direction of the thrust of the propeller in sufficient time and to bring the ship to rest within a reasonable distance, including the effectiveness of any supplementary means of manoeuvring or stopping the ship² (SOLAS 74/88 reg.II-1/28);
- (CI) 2.1.3.18 confirming that the main and auxiliary steering gear are so arranged that the failure of one of them does not render the other inoperative² (SOLAS 74/88 reg.II-1/29);
- (CI) 2.1.3.21 confirming that the main steering gear is capable of steering the ship at maximum ahead service speed and is capable of putting the rudder over from 35° on one side to 35° on the other side with the ship at its deepest seagoing draught³ and running ahead at maximum ahead service speed and, under the same conditions, from 35° on either side to 30° on the other side in not more than 28s² (SOLAS 74/88 reg.II-1/29);
- (CI) 2.1.3.22 confirming that the auxiliary steering gear is capable of steering the ship at navigable speed and of being brought speedily into action in an emergency and that it is capable of putting the rudder over from 15° on one side to 15° on the other side in not more than 60 s with the ship at its deepest seagoing draught and running ahead at one half of the maximum ahead service speed or 7 knots, whichever is the greater² (SOLAS 74/88 reg.II-1/29);
- (CI) 2.1.3.24 confirming that, where the main steering gear comprises two or more identical power units and an auxiliary steering gear is not fitted, a defect can be isolated so that steering capability can be maintained or speedily regained after a single failure in its piping system or in one of the power units² (SOLAS 74/88 reg.II-1/29);
- (CI) 2.1.3.53bis examining, where applicable, the alternative design and arrangements

² For ships fitted with alternative propulsion and steering arrangements other than traditional arrangement, such as but not limited to, azimuthing propulsors or water jet propulsion systems, refer to MSC.1/Circ.1416.

³ For trials with the ship not at the deepest sea going draught, refer to MSC.1/Circ.1425.

- for machinery or electrical installations, or fire safety, in accordance with the test and inspection requirements, if any, specified in the approved documentation (SOLAS 00/06 regs. II-1/55 and II-2/17);
- (CI) 2.1.3.60 confirming that installed materials do not contain asbestos⁴ (SOLAS 74/00/09 reg. II-1/3-5);
- (CI) 2.1.3.62bis prior to the review of the coating technical file:
- (CI) 2.1.3.62bis.1 checking that the Technical Data Sheet and Statement of Compliance or Type Approval Certificate comply with the Standard;
- (CI) 2.1.3.62bis.2 checking that the coating identification on representative containers is consistent with the coating identified in the Technical Data Sheet;
- (CI) 2.1.3.62bis.3 checking that the inspector is qualified in accordance with the qualification standards;
- (CI) 2.1.3.62bis.4 checking that the inspector's reports of surface preparation and the coating's application indicate compliance with the manufacturer's Technical Data Sheet and Statement of Compliance or Type Approval Certificate; and
- (CI) 2.1.3.62bis.5 monitoring the implementation of the coating inspection requirements.
- (CI) 2.1.3.62ter reviewing the Coating Technical File (SOLAS 74/00/06/10 regs. II-1/3-2 and II-1/3-11; MSC.215(87) and MSC.288(87));
- (CI) 2.1.3.63 confirming for oil tankers and bulk carriers, when appropriate, the provision of means of access to cargo and other spaces in accordance with the arrangements in the Ship Structures Access Manual (SOLAS 74/00/02/04 reg. II-1/3-6, SOLAS 10 regs. II-1/3-10 and MSC.287(87));
- (CI) 2.1.4.1bis confirming in accordance with the survey plan, that oil tankers of 150 m in length and above, where appropriate, meet the applicable structural requirements of an organization recognized by the Administration, or national standards of the Administration, conforming to the functional requirements of the Goal-based Ship Construction Standards for Bulk Carriers and Oil Tankers (SOLAS 10 reg. II-1/3-10);
- (CI) 2.1.4.9 confirming that all cargo oil tanks in crude oil tankers have either:
- (CI) 2.1.4.9.1 been coated in accordance with MSC.288(87); or
- (CI) 2.1.4.9.2 been protected by alternative means of corrosion protection or utilization of approved corrosion resistance material (steel) in accordance with MSC.289(87) (SOLAS 10 reg. II-1/3-11).
- (CI) 2.1.5.1 the provisions of (CI) 2.1.4 except (CI) 2.1.4.1bis.

⁴ Guidance on the means to verify that installed materials do not contain asbestos is contained in MSC.1/Circ.1426 on Unified interpretation on the implementation of SOLAS regulation II-1/3-5 and MSC.1/Circ.1379.

- (CI) 2.1.6.1 confirming that the stability information and the damage control plans and damage control booklets have been provided (SOLAS 74/88 regs.II-1/22 and 23-1) (SOLAS 06 regs.II-1/5-1 and 19);
- (CI) 2.1.6.3 confirming that the approved Cargo Securing Manual for ships carrying cargo units including containers is provided on board (SOLAS 74/94 98 reg.VI/5.6);
- (CI) 2.1.6.6 confirming when appropriate that a coating technical file reviewed by the Administration has been provided on board (SOLAS 74/00/06/10 regs.II-1/3-2 and 3-11);
- (CI) 2.1.6.7bis confirming, for oil tankers and bulk carriers of 150 m in length and above, that the Ship Construction File has been provided (SOLAS 10 reg. II-1/3-10 and MSC.290(87));
- (CI) 2.1.6.7ter confirming, when appropriate, that a technical file verified by the Administration has been provided on board (SOLAS 10 reg. II-1/3-11 and MSC.289(87));
- (CA) 2.2.1.11bis confirming when appropriate, the validity of the International Energy Efficiency Certificate (MARPOL Annex VI regs.6.4 and 6.5);
- (CA) 2.2.1.17 confirming that the stability information, including damage stability, where applicable, and the damage control plans and damage control booklets are on board (SOLAS 74/88 regs.II-1/22, 23 and 25) (SOLAS 06 reg.II-1/5-1 and 19);
- (CA) 2.2.1.26 confirming approved Cargo Securing Manual for ships carrying cargo units including containers is on board (SOLAS 74/94 98 reg.VI/5.6);
- (CA) 2.2.1.30 confirming when appropriate that the coating technical file is available on board and maintained (SOLAS 74/00/06/10 regs.II-1/3-2 and 3-11);
- (CA) 2.2.1.31bis confirming, where appropriate, for crude oil tankers, that a technical file verified by the Administration has been provided on board (SOLAS 10 reg.II-1/3-11 and MSC.289(87));
- (CA) 2.2.1.31ter confirming, for oil tankers and bulk carriers of 150 m in length and above, that the Ship Construction File is available (SOLAS 10 reg. II-1/3-10 and MSC.287(87));
- (CA) 2.2.2.2bis examining, for bulk carriers of 150 m and above, where appropriate, the ship's structure in accordance with the Ship Construction File, taking into account identified areas that need special attention (SOLAS 10 reg. II-1/3-10 and MSC.287(87));
- (CA) 2.2.2.24bis examining, where applicable, the alternative design and arrangements for machinery or electrical installations, or fire safety, in accordance with the test, inspection and maintenance requirements, if any, specified in the approved documentation (SOLAS 00/06 regs.II-1/55 and II-2/17);
- (CA) 2.2.2.30 confirming that no new materials containing asbestos were installed on board⁴ (SOLAS 74/00/04/09 reg.II-1/3-5);

- (CA) 2.2.3.15**bis** confirming that the coating system in cargo oil tanks of crude oil tankers, when appropriate, is maintained and that in-service maintenance and repair activities are recorded in the coating technical file (SOLAS 10 reg. II-1/3-11 and MSC.288(87));
- (CA) 2.2.3.17 examining, for oil tankers of 150 m in length and above, where appropriate, the ship's structure in accordance with the Ship Construction File, taking into account identified areas that need special attention (SOLAS reg. II-1/3-10 and MSC.287(87));
- (CA) 2.2.4.1 the provisions of (CA) 2.2.3 except (CA) 2.2.3.15**bis** and (CA) 2.2.3.17.
- (CIn) 2.3.4.1 the provisions of (CA) 2.2.3 except (CA) 2.2.3.15**bis** and (CA) 2.2.3.17.
- (CR) 2.4.4.1 the provisions of (CA) 2.2.3 except (CA) 2.2.3.15**bis** and (CA) 2.2.3.17.

5 Amendments to annex 1 – Survey Guidelines under the 1974 SOLAS Convention as modified by the 1988 Protocol relating thereto – (R) 4 Guidelines for Surveys for the Cargo Ship Safety Radio Certificate:

- (RI) 4.1.2.16.4 checking that the unique beacon identification code EPIRB ID is clearly marked on the outside of the equipment and, where possible, decoding the unique beacon identification code EPIRB identity number confirming it is correct;
- (RI) 4.1.2.16.4**bis** checking that the unique beacon identification code programmed in the EPIRB corresponds with the unique beacon identification code assigned by or on behalf of the Administration;
- (RI) 4.1.2.16.4**ter** checking that the MMSI number if encoded in the beacon corresponds with the MMSI number assigned to the ship;
- (RP) 4.2.1.11**bis** confirming when appropriate, the validity of the International Energy Efficiency Certificate (MARPOL Annex VI regs 6.4 and 6.5);

6 Amendments to annex 1 – Survey Guidelines under the 1974 SOLAS Convention as modified by the 1988 Protocol relating thereto – (P) 5 Guidelines for Surveys for the Passenger Ship Safety Certificate:

- (PI) 5.1.1.12 examining the plans for the fire pumps, including the emergency fire pump¹ if applicable, fire mains, hydrants, hoses and nozzles and the international shore connection (SOLAS 74/88 reg.II-1/39 and SOLAS 74/00 reg.II-2/10.2; FSSC chs.2 and 12) (SOLAS 74/88 reg.II-1/39 and regs.II-2/4 and 19);
- (PI) 5.1.1.19 examining the plans for the protection of special category spaces and other cargo spaces (SOLAS 74/88 regs.II-2/37, 38 and 39) (SOLAS 74/00/06/10 regs.II-2/ 7.6, 9 and 20; FSSC chs. 9 and 10);
- (PI) 5.1.1.20 examining the plans for the fixed fire detection and alarm system, the crew alarm and the public address system or other effective means of communication, and any automatic sprinkler, fire detection and fire alarm system, as applicable, in machinery spaces, including enclosed spaces containing incinerators, accommodation and service spaces and control spaces (SOLAS 74/00/06/10 reg. II-2/7 (except 7.5.5, 7.6

and 7.9); FSSC chs. 8, 9 and 10) (SOLAS 74/88 reg.II-2/40) (SOLAS 74/00/06 regs.II-2/7 and 12) (SOLAS 74/88 reg.II-2/40);

- (PI) 5.1.1.20bis examining the plans for the crew alarm and the public address system or other effective means of communication (SOLAS 74/00/06 regs.II-2/7.9; FSSC ch. 9; LSAC ch.7) (SOLAS 74/88 reg.II-2/40);
- (PI) 5.1.1.21 examining the plans for the special arrangements for the carriage of dangerous goods, when appropriate, including water supplies, electrical equipment and wiring, fire detection sample extraction smoke detection system, bilge pumping and personnel protection (SOLAS 74/88 regs.II-2/41 and 54) (SOLAS 74/00/08 reg.II-2/19; FSSC chs. 9 and 10);
- (PI) 5.1.1.23 examining the design of the survival craft, including their construction, equipment, fittings, release mechanisms launching and recovery appliances and embarkation and launching arrangements (SOLAS 74/88/06 regs.III/4, 20 to 24, 36, 38 to 44 and 48) (SOLAS 06 reg.III/4) (LSAC sections 3.2, 4.1 to 4.6, 6.1 to 6.2);
- (PI) 5.1.1.35 checking the plans provision and specification of the pilot transfer arrangement, the pilot ladders, the combination arrangements, where applicable, the access to the ship's deck and the associated equipment and lighting and hoists/pilot transfer arrangements (SOLAS 74/00/10 reg.V/23);
- (PI) 5.1.2.12 confirming the arrangements for closing sidescuttles and their deadlights, also scuppers, sanitary discharges and similar openings and other inlets and discharges in the shell plating below the bulkhead deck (SOLAS 06 reg.II-1/43-15);
- (PI) 5.1.2.30 confirming and recording the ability of the machinery to reverse the direction of the thrust of the propeller in sufficient time and to bring the ship to rest within a reasonable distance, including the effectiveness of any supplementary means of manoeuvring or stopping the ship² (SOLAS 74/88 reg.II-1/28);
- (PI) 5.1.2.31 confirming that the main and auxiliary steering gear are so arranged that the failure of one of them does not render the other inoperative² (SOLAS 74/88 reg.II-1/29);
- (PI) 5.1.2.34 confirming that the main steering gear is capable of steering the ship at maximum ahead service speed and is capable of putting the rudder over from 35 degrees on one side to 35 degrees on the other side with the ship at its deepest seagoing draught³ and running ahead at maximum ahead service speed and, under the same conditions, from 35 degrees on either side to 30 degrees on the other side in not more than 28 seconds² (SOLAS 74/88 reg.II-1/29);
- (PI) 5.1.2.35 confirming that the auxiliary steering gear is capable of steering the ship at navigable speed and of being brought speedily into action in an emergency and that it is capable of putting the rudder over from 15 degrees on one side to 15 degrees on the other side in not

more than 60 seconds with the ship at its deepest seagoing draught and running ahead at one half of the maximum ahead service speed or 7 knots, whichever is the greater² (SOLAS 74/88 reg.II-1/29);

- (PI) 5.1.2.37 confirming that, where the main steering gear comprises two or more identical power units and an auxiliary steering gear is not fitted, a defect can be isolated so that steering capability can be maintained or speedily regained after a single failure in its piping system or in one of the power units² (SOLAS 74/88 reg.II-1/29)
- (PI) 5.1.2.65.1 for passenger ships, constructed on or after 1 July 2010¹⁰, confirming provision of supplementary lighting in all cabins, and checking that such lighting automatically illuminates and remains on for a minimum of 30 min when power to the normal cabin lighting is lost (SOLAS 06/10 reg.II-1/41.6);

¹⁰ ~~Refer to Guidance for application of SOLAS II-1/41.6 (MSC.1/Circ.1372)~~

- (PI) 5.1.2.67bis examining, where applicable, the alternative design and arrangements for machinery or electrical installations, fire safety, or life-saving appliances and arrangements, in accordance with the test and inspection requirements, if any, specified in the approved documentation (SOLAS 00/06 regs.II-1/55, II-2/17 and III/38);
- (PI) 5.1.2.68 examining the fire pumps and fire main and the disposition of the hydrants, hoses and nozzles and the international shore connection and checking that each fire pump, including the emergency fire pump, can be operated separately so that two jets of water are produced simultaneously from different hydrants at any part of the ship whilst the required pressure is maintained in the fire main and testing that the emergency fire pump, if applicable, has the required capacity, and if the emergency fire pump is the main supply of water for any fixed fire-extinguishing system, checking that the emergency fire pump has the capacity for this system¹ (SOLAS 74/88 regs.II-2/4 and 19, FSSC chs. 2 and 12);
- (PI) 5.1.2.83 confirming the fire protection arrangements, including fire detection and sample extraction smoke detection systems for special category spaces and other cargo spaces for cargo and dangerous goods and testing, as appropriate, the operation of the means for closing the various openings (SOLAS 74/88 regs.II-2/37, 38 and 39) (SOLAS 74/00 regs.II-2/7.6 and 10.7; FSSC chs. 5, 9 and 10);
- (PI) 5.1.2.83bis confirming the fire protection arrangements, including fire detection and sample extraction smoke detection systems, where applicable for vehicle, special category and ro-ro spaces and testing, as appropriate, the operation of the means for closing the various openings (SOLAS 74/88 regs.II-2/37, and 38) (SOLAS 74/00 reg.II-2/20 (except 20.5); FSSC chs. 5, 6, 7, 9, 10);
- (PI) 5.1.2.84 confirming and testing, as appropriate, ~~the any~~ fixed fire detection and alarm system, ~~the special alarm and the public address system or other effective means of communication and any automatic sprinkler, fire detection and fire alarm system, as applicable, in machinery spaces, including enclosed spaces containing incinerators, accommodation,~~

- service and control spaces (SOLAS 74/88 reg.II-2/40) (SOLAS 74/00/06/10 regs II-2/7 (except 7.5.5, 7.6 and 7.9); FSSC chs. 8 and 9) (SOLAS 74/88 reg.II-2/40)(SOLAS 74/00/06 regs.II-2/7 and 12);;
- (PI) 5.1.2.84***bis*** confirming and testing the special alarm and the public address system or other effective means of communication (SOLAS 74/88 reg.II-2/40) (SOLAS 74/00/06/10 reg.II-2/12; LSAC ch. 7);
- (PI) 5.1.2.86 examining, when appropriate, the special arrangements for carrying dangerous goods, including checking the electrical equipment and wiring, fire detection, ventilation and boundary insulation, the provision of protective clothing and portable appliances and the testing of the water supply, bilge pumping and any water spray system (SOLAS 74/88 regs.II-2/41 and 54) (SOLAS 74/00/08 reg.II-2/19);
- (PI) 5.1.2.88 examining each survival craft, including its equipment, and that the required number of search and rescue locating devices are fitted in liferafts and those liferafts are clearly marked (SOLAS 74/88/00/02/08 regs.III/20, 21 and 26; LSAC sections 2.3 to 2.5, 3.2 and 4.1 to 4.6);
- (PI) 5.1.2.90 deployment of 50% of the MES after installation (~~LSAC section 5.1 and MSC/Circ.809~~ LSAC paragraph 6.2.2.2);
- (PI) 5.1.2.102 checking that a decision support system is provided for the Master (SOLAS 74/00 reg.III/29; SOLAS 06 regs. II-2/21 and 22);
- (PI) 5.1.2.109 checking that the International Code of Signals and an up-to-date copy of Volume III of the International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual have been provided. (SOLAS 74/00/02 reg.V/21);
- (PI) 5.1.2.110 checking the provision of the pilot transfer arrangement, the access to the ship's deck and the associated equipment and lighting, checking the and, as appropriate, the deployment or operation of the pilot ladders and hoists/pilot transfer combination arrangements, where applicable (SOLAS 74/00/10 reg.V/23);
- (PI) 5.1.2.126.4 checking that the unique beacon identification code ~~EPIRB ID~~ is clearly marked on the outside of the equipment and, where possible, decoding the unique beacon identification code ~~EPIRB identity number~~ confirming it is correct;
- (PI) 5.1.2.126.4***bis*** checking that the unique beacon identification code programmed in the EPIRB corresponds with the unique beacon identification code assigned by or on behalf of the Administration;
- (PI) 5.1.2.126.4***ter*** checking that the MMSI number if encoded in the beacon corresponds with the MMSI number assigned to the ship;
- (PI) 5.1.2.135 checking ~~that the provision, and, operation and the annual test has been carried out for of~~ the automatic identification system (SOLAS 74/00/04 reg.V/19);

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- (PI) 5.1.2.137 confirming that installed materials do not contain asbestos⁴ (SOLAS 09 reg.II-1/3-5);
- (PI) 5.1.3.1 confirming that the stability information and damage control plans and damage control booklets have been provided (SOLAS 74/88 regs.II-1/22 and 23) (SOLAS 06 regs.II-1/5-1 and 19);
- (PI) 5.1.3.10 confirming that emergency instructions are available for each person on board, that the muster list is posted in conspicuous places, and that they are in a language understood by the persons on board (SOLAS 74/00 regs.III/8 and ~~53~~ 37);
- (PI) 5.1.3.16bis checking that records are provided, identifying any pilot ladders placed into service (SOLAS 10 reg.V/23.2.4);
- (PR) 5.2.1.8bis confirming when appropriate, the validity of the International Energy Efficiency Certificate (MARPOL Annex VI regs. 6.4 and 6.5);
- (PR) 5.2.1.17 confirming that the stability information and damage control plans and damage control booklets are readily available (SOLAS 74/88 regs.II-1/22 and 23) (SOLAS 06 regs.II-1/5-1 and 19);
- (PR) 5.2.1.27bis confirming that, if applicable, a factual statement issued by the manufacturer of the lifeboat release mechanism is available, confirming the successful overhaul examination of a mechanism compliant with paragraphs 4.4.7.6.4 to 4.4.7.6.6 of the LSA Code, or, alternatively, that a statement of acceptance of the installation of a replacement release and retrieval system to an existing lifeboat is available (SOLAS 11 reg.III/1.5; LSAC section 4.4.7.6);
- (PR) 5.2.1.35bis checking that records are maintained identifying any pilot ladders placed into service and any repair effected (SOLAS 10 reg.V/23.2.4);
- (PR) 5.2.1.38 confirming the provisions of (PI) 5.1.3.14 to (PI) 5.1.3.19 except (PI) 5.1.3.16bis;
- (PR) 5.2.2.31 confirming that the main and auxiliary steering gear are being properly maintained, are arranged so that the failure of one does not render the other inoperative and that the auxiliary steering gear is capable of being brought speedily into action in an emergency² (SOLAS 74/88 reg.II-1/29);
- (PR) 5.2.2.62bis examining, where applicable, the alternative design and arrangements for machinery or electrical installations, fire safety, or life-saving appliances and arrangements, in accordance with the test, inspection and maintenance requirements, if any, specified in the approved documentation (SOLAS 00/06 regs.II-1/55, II-2/17 and III/38);
- (PR) 5.2.2.72 examining and testing, as far as practicable, any fire detection and fire alarm arrangements in machinery spaces, including enclosed spaces containing incinerators, if applicable, accommodation and service spaces and control spaces (SOLAS 74/00/10 reg.II-2/7 (except 7.5.5, 7.6 and 7.9); FSSC chs. 8 and 9) (SOLAS 74/88 regs.II-2/11, 12, 13, 13-1, 14, 36 and 41);
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- (PR) 5.2.2.82 examining the fire-extinguishing arrangements, examining and testing the fire detection and alarm systems, the sample extraction smoke detection systems, where applicable including fire detection in cargo spaces for general cargo and dangerous goods and testing, as far as practicable and as appropriate, the operation of the means for closing the various openings (SOLAS 74/00 regs.II-2/7.6 and 10.7; FSSC chs.5, 9 and 10) (SOLAS 74/88 reg.II-2/39);
- (PR) 5.2.2.83 examining the fire-extinguishing arrangements ~~including fire detection~~ examining and testing the fire detection and alarm system, the sample extraction smoke detection system, where applicable, in vehicle, special category and ro-ro spaces and testing, as far as practicable and as appropriate, the operation of the means for closing the various openings (SOLAS 74/00 reg.II-2/20 (except 20.5); FSSC chs.5, 6, 7, 9 and 10) (SOLAS 74/88 regs.II-2/37, 38 and 38-1);
- (PR) 5.2.2.85 examining, when appropriate, the special arrangements for carrying dangerous goods, including checking the electrical equipment and wiring, ~~fire detection~~, ventilation, the provision of personnel protection clothing and portable appliances, testing any fire detection and alarm system and any sample extraction smoke detection system and testing, as far as practicable, the water supply, bilge pumping and any water spray system (SOLAS 74/00/08 reg.II-2/19 (except 19.3.8, 19.3.10 and 19.4); FSSC chs.3, 4, 7, 9 and 10) (SOLAS 74/88 regs.II-2/41 and 54);
- (PR) 5.2.2.92 examining each survival craft, including its equipment and, when fitted, the on-load release mechanism and hydrostatic lock, and for inflatable liferafts the hydrostatic release unit and float free arrangements, including the date of servicing or replacement. Checking that the hand-flares are not out of date and that the required number of search and rescue locating devices are fitted in liferafts and those liferafts are clearly marked (SOLAS 74/96/00/02/08 regs.III/20, 21, 23, 24 and 26; LSAC sections 2.3 to 2.5, 3.2 and 4.1 to 4.6);
- (PR) 5.2.2.101 confirming that a decision support system is provided for the Master (SOLAS 74/88 reg.III/29) (SOLAS 06 regs. II-2/21 and 22);
- (PR) 5.2.2.111 checking that the International Code of Signals and an up-to-date copy of Volume III of the International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual have been provided. (SOLAS 74/00/02 reg.V/21);
- (PR) 5.2.2.113 checking the provision, and operation of ~~and that the annual test has been carried out for~~ the automatic identification system, where fitted, and whether the annual test has been carried out and a copy of the test report is on board (SOLAS 74/00/04/10 regs.V/18.9 and 19);
- (PR) 5.2.2.114 checking the provision and specification of the pilot ladders and ~~hoists~~ pilot transfer arrangements (SOLAS 74/00/10 reg.V/4723);
- (PR) 5.2.2.116 confirming that no new materials containing asbestos were installed on board (SOLAS 74/00/05/09 reg.II-1/3-5)⁴

7 Amendments to annex 2 – Survey Guidelines under the 1966 Load Line Convention as modified by the 1988 Protocol relating thereto – (L) 1 Guidelines for surveys for the International Load Line Certificate or International Load Line Exemption Certificate:

(LI) 1.1.2.14 examining the special requirements for ships permitted to sail with type "A" or type "B-minus" freeboards (LLC 66/88/03 regs.26 and 27);

(LA) 1.2.1.11bis confirming when appropriate, the validity of the International Energy Efficiency Certificate (MARPOL Annex VI, regs. 6.4 and 6.5)

8 Amendments to annex 3 – Survey Guidelines under the MARPOL Convention – (O) 1 Guidelines for Surveys for the International Oil Pollution Prevention Certificate:

(OI) 1.1.2.11 examining, for oil tanker of 5,000 tonnes deadweight and above delivered on or after 1 February 2002, the intact stability (MARPOL 90/04 Annex I reg.27);

(OA) 1.2.1.9bis confirming when appropriate, the validity of the International Energy Efficiency Certificate (MARPOL Annex VI, regs. 6.4 and 6.5);

9 Amendments to annex 3 – Survey Guidelines under the MARPOL Convention – (N) 2 Guidelines for Surveys for the International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in Bulk:

(NI) 2.1.2.10 confirming if applicable the construction and arrangements of a ship certified to carry individually identified vegetable oils under exemption from the carriage requirements (MARPOL 90/04 Annex II reg.4.3 4.1.3).

(NI) 2.1.3.3 confirming that the shipboard marine pollution emergency plan is provided (MARPOL ~~90~~/04 Annex II reg.17).

(NA) 2.2.1.7bis confirming when appropriate, the validity of the International Energy Efficiency Certificate (MARPOL Annex VI, regs. 6.4 and 6.5);

10 Amendments to annex 3 – Survey Guidelines under the MARPOL Convention – (S) 3 Guidelines for Surveys for the International Sewage Pollution Prevention Certificate:

(SI) 3.1.1.2 if a sewage treatment plant is fitted, checking that it is type approved by the Administration in accordance with the appropriate resolution (MARPOL Annex IV regs.9.1.1 and 9.2.1);

(SI) 3.1.1.3 if a sewage comminuting and disinfecting system is fitted, checking that it is approved by the Administration and that facilities for the temporary storage of sewage are provided (MARPOL Annex IV reg.9.1.2);

(SI) 3.1.1.4 if a sewage holding tank is fitted, checking its capacity having regard to the number of persons on board (MARPOL Annex IV regs.9.1.3 and 9.2.2);

(SI) 3.1.2.1 checking externally, as applicable, the sewage treatment plant or the sewage comminuting and disinfecting system, and confirming their operation (MARPOL Annex IV regs.4.1.1 and 9.1.1, 9.1.2 and 9.2.1);

- (SI) 3.1.2.2 if a sewage holding tank is fitted, checking that it has been constructed in a satisfactory manner, and checking that the holding tank has a means to indicate visually the amount of its contents (MARPOL Annex IV regs.9.1.3 and 9.2.2);
- (SR) 3.2.1.4bis confirming when appropriate, the validity of the International Energy Efficiency Certificate (MARPOL Annex VI regs. 6.4 and 6.5);
- (SR) 3.2.2.2 examining externally the sewage pollution prevention system and confirming, as far as practicable its satisfactory operation (MARPOL Annex IV, reg.9);
- (SR) 3.2.2.4 confirming, for ships where a sewage holding tank is fitted as a sewage system, that an approval for the rate of discharge is available (MARPOL IV regs.9.1.3 and 11.1.1)
- 11 Amendments to annex 3 – Survey Guidelines under the MARPOL Convention – (A)
4 Guidelines for Surveys for the International Air Pollution Prevention Certificate and the NO_x Technical Code:
- (AI) 4.1.2.2.1.4 for marine diesel engines of an output more than 5,000 kW and a per cylinder displacement at or above 90 litres/cylinder installed on ships constructed between 1 January 1990 and 31 December 1999, check whether:
- .1 an approved method exists;
 - .2 an approved method is not commercially available; or
 - .3 that an approved method is installed and where this is the case, that there is an approved method file,
- and apply the verification procedures as given in the approved method file;
- .4 or that the engine has been certified, confirming that it operates within the limits set forth for Tier I, Tier II or Tier III (MARPOL Annex VI req. 13.7.3);
- (AI) 4.1.2.3.1 confirming, if appropriate, that:
- .1 satisfactory arrangements are in place for using compliant fuel as required; or
 - .2 satisfactory installation and operation of the fuel switching arrangements are in place when tanks are provided for different grades of fuel, and that a written procedure showing how the fuel oil changeover is done, is available; or
- (AA) 4.2.1.4bis checking when appropriate, the validity of the International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in Bulk;
- (AA) 4.2.1.4ter checking when appropriate, the validity of the International Sewage Pollution Prevention Certificate;

(AA) 4.2.1.4~~quad~~ confirming when appropriate, the validity of the International Energy Efficiency Certificate (MARPOL Annex VI, regs. 6.4 and 6.5)

(AA) 4.2.2.4.6 for a marine diesel engine with an output of more than 5,000 kW and a per cylinder displacement at or above 90 litres/cylinder installed on ships constructed between 1 January 1990 and 31 December 1999, check whether:

- .1 an approved method exists;
- .2 an approved method is not commercially available; or
- .3 that an approved method is installed and where this is the case, that there is an approved method file,

and apply the verification procedures as given in the approved method file;

- .4 or that the engine has been certified, confirming that it operates within the limits set forth for Tier I, Tier II or Tier III (MARPOL Annex VI reg. 13.7.3);

(AR) 4.4.2.2.1 confirming, if necessary by simulated test or equivalent, the satisfactory operation of the ~~following~~ alarms and safety devices.

12 Amendments to annex 4 – Survey Guidelines under mandatory Codes – Guidelines for Surveys for the International Certificate of Fitness for the Carriage of Dangerous Chemicals in Bulk and the Certificate of Fitness for the Carriage of Dangerous Chemicals in Bulk:

(DA) 1.2.1.9~~bis~~ confirming when appropriate, the validity of the International Energy Efficiency Certificate (MARPOL Annex VI, regs. 6.4 and 6.5);

(DA) 1.2.1.20 confirming that the Shipboard marine pollution emergency plan is on board (MARPOL 73/78/02 04 Annex II reg.~~46-17~~);

(DA) 1.2.1.21 confirming that the Cargo Record Book is on board and being correctly used (MARPOL 73/78/91/97/02 04 Annex II reg.9 15);

13 Amendments to annex 4 – Survey Guidelines under mandatory Codes –Guidelines for Surveys for the International Certificate of Fitness for the Carriage of Liquefied Gases in Bulk:

(GA) 2.2.1.9~~bis~~ confirming when appropriate, the validity of the International Energy Efficiency Certificate (MARPOL Annex VI, regs. 6.4 and 6.5);

14 Amendments to appendix 1 Summary of Amendments to Mandatory Instruments reflected in the Survey Guidelines under the HSSC:

SOLAS 1974 up to and including the 2009— 2011 amendments, (resolution MSC.282(86) 317(89))

SOLAS PROT 1988 up to and including the 2009—2010 amendments (resolution MSC.283(86)309(88))

MARPOL up to and including the 2010—2012 amendments (resolution MEPC.490(60)217(63))

NO_x Technical Code up to and including the ~~2008~~2012 amendments (resolution
MEPC.177(58)217(63))

ANNEX 35

DRAFT ASSEMBLY RESOLUTION

2013 NON-EXHAUSTIVE LIST OF OBLIGATIONS UNDER INSTRUMENTS RELEVANT TO THE IMO INSTRUMENTS IMPLEMENTATION CODE

THE ASSEMBLY,

RECALLING Article 15(j) of the Convention on the International Maritime Organization concerning the functions of the Assembly in relation to regulations and guidelines regarding maritime safety and the prevention and control of marine pollution from ships,

RECALLING ALSO that, by resolution A.1054(27), it adopted the *Code for the Implementation of Mandatory IMO Instruments, 2011*, annexes to which, provide a non-exhaustive list of instruments and obligations for guidance on the implementation and enforcement of IMO instruments, in particular concerning the identification of the auditable areas relevant to Voluntary IMO Member State Audit Scheme,

RECOGNIZING the need for the annexes to above-mentioned Code to be further revised to take account of the amendments to the IMO instruments referred to in the Code which have entered into force or become effective since the adoption of resolution A.1054(27),

RECOGNIZING FURTHER that parties to the relevant international conventions have, as part of the ratification process, accepted to fully meet their responsibilities and to discharge their obligations under the conventions and other instruments to which they are party,

REAFFIRMING that States have the primary responsibility to have in place an adequate and effective system to exercise control over ships entitled to fly their flag, and to ensure that they comply with relevant international rules and regulations in respect of maritime safety, security and protection of the marine environment,

REAFFIRMING FURTHER that States, in their capacity as flag, port and coastal States, have other obligations and responsibilities under applicable international law in respect of maritime safety, security and protection of the marine environment,

NOTING that, while States may realize certain benefits by becoming party to instruments aiming at promoting maritime safety, security and protection of the marine environment, these benefits can only be fully realized when all parties carry out their obligations as required by the instruments concerned,

NOTING ALSO that the ultimate effectiveness of any instrument depends, inter alia, upon all States:

- (a) becoming party to all instruments related to maritime safety, security and pollution prevention and control;
- (b) implementing and enforcing such instruments fully and effectively;
- (c) reporting to the Organization, as required,

NOTING ALSO resolution [A...(28)] by which it adopted the IMO Instruments Implementation Code (III Code) [revoking resolution A.1054(27) on the Code for the Implementation of Mandatory IMO Instruments, 2011],

NOTING ALSO resolution A.[...](28) by which it adopted amendments to the International Convention on Load Lines, 1966, the International Convention on Tonnage Measurement of Ships, 1969 and the Convention on the International Regulation for Preventing Collisions at Sea, 1972, to make the III Code mandatory under these Conventions,

NOTING FURTHER that the Marine Environment Protection Committee and the Maritime Safety Committee have developed requirements for adoption by Contracting Governments to the International Convention for the Safety of Life at Sea, 1974, and the Protocol of 1988 relating to the International Convention on Load Lines, 1966, the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, the Protocol of 1997 to amend the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, [and the International Convention on Standards of Training, Certification and Watchkeeping, 1978, as amended], respectively, to make the III Code mandatory under these instruments,

HAVING CONSIDERED the recommendations made by the Marine Environment Protection Committee [at its sixty-fifth] session and the Maritime Safety Committee, [at its ninety-second] session,

1. ADOPTS the 2013 non-exhaustive list of obligations under instruments relevant to the III Code, set out in the annex to the present resolution;
2. URGES Governments of all States, in their capacity as flag, port and coastal States, to make as much use as possible of the list in the implementation of IMO instruments on a national basis;
3. REQUESTS the Maritime Safety Committee and the Marine Environment Protection Committee to keep the list under review and, under the coordination of the Council, to propose amendments thereto to the Assembly.

* * *

ANNEX 1

OBLIGATIONS OF CONTRACTING GOVERNMENTS/PARTIES

The following table contains a non-exhaustive list of obligations, including those obligations imposed when a right is exercised.

	OBLIGATIONS OF CONTRACTING GOVERNMENTS/PARTIES	
SOURCE	SUMMARY DESCRIPTION	COMMENTS
TONNAGE 69		
Art. 1	General obligation under the Convention	
Art. 5(2)	Force majeure	
Art. 8	Issue of a certificate by another Government	
Art. 10	Cancellation of certificate	
Art. 11	Acceptance of certificates	
Art. 15	Communication of information	
LL 66 and LL PROT 88¹		
Art. 1	General obligation under the Convention	
	General obligations	LL PROT 88 only (Art. I)
Art. 7(2)	Force majeure	
Art. 17	Issue or endorsement of certificates by another Government	amended by LL PROT 88
Art. 20	Acceptance of certificates	
Art. 25	Special rules drawn up by agreement	
Art. 26	Communication of information	
	Communication of information	LL PROT 88 only (Art. III)

¹ When the obligation does not derive from the International Convention on Load Lines, 1966, but solely from the Protocol of 1988 relating thereto, this is indicated in the "Comments" column.

	OBLIGATIONS OF CONTRACTING GOVERNMENTS/PARTIES	
SOURCE	SUMMARY DESCRIPTION	COMMENTS
COLREG 72 Art. I	General obligations	
STCW 78 Art. I Art. IV Art. XI(1) Reg. I/2.12 Reg. I/2.14 Reg. I/2.15 and 2.16 Reg. I/3 Reg. I/5 Reg. I/6.1 Reg. I/6.2 Reg. I/7 Reg. I/8.1 and 8.2 Reg. I/8.3 Reg. I/9.1 and 9.2	General obligations under the Convention Communication of information Promotion of technical co-operation Issuance of certificates of competency Maintenance of a register or registers of all certificates and endorsements Availability of information on the status of certificates of competency, endorsements and dispensations (as of 1 January 2017, available in English through electronic means) Principles governing near-coastal voyages, communication of information and incorporation of limits in the endorsements National provisions – impartial investigation, enforcement measures including penalties or disciplinary measures and cooperation Training and assessment – Administration, supervision and monitoring Qualification of those responsible for training and assessment Communication of the information as referred to in article IV of the STCW 78 Convention and A-I/7 of the STCW Code Quality standards system and periodical independent evaluation Communication of a report Medical standards, procedures for issuance of medical certificates, and recognition of medical practitioners	

	OBLIGATIONS OF CONTRACTING GOVERNMENTS/PARTIES	
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Reg. I/9.6	Procedures for governing the validity of a medical certificate which expires in the course of a voyage	
Reg. I/11.4 and 11.5	Comparison of standards of competence – determination of need for appropriate refresher and updating training or assessment and formulation or promotion of the formulation of a structure of refresher and updating courses	
Reg. II/5.3	Comparison of standards of competence – determination of the need to update qualifications for able seamen to whom certificates are issued before 1 January 2012	
Reg. III/5.3	Comparison of standards of competence – determination of the need to update qualifications for ratings in engine department to whom certificates are issued before 1 January 2012	
Reg. III/6.3	Comparison of standards of competence – determination of the need to update qualifications for electro-technical officers to whom certificates are issued before 1 January 2012	
Reg. III/7.3	Comparison of standards of competence – determination of the need to update qualifications for electro-technical officers to whom certificates are issued before 1 January 2012	
Reg. VII/3.1	Principles governing the issue of alternative certificates	
SOLAS 74		
Art. I	General obligations under the Convention	in SOLAS PROT 78 and SOLAS PROT 88
Art. III	Communication of information	in SOLAS PROT 78 and SOLAS PROT 88
Art. V(c)	Carriage of persons in emergencies – reporting	
Art. VII	Special rules drawn up by agreement	

	OBLIGATIONS OF CONTRACTING GOVERNMENTS/PARTIES	
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Art. XI	Denunciation	in SOLAS PROT 88 (Art. VII)
Reg. I/13	Issue or endorsement of certificates by another Government	in SOLAS PROT 88 also reg. I/19(b)
Reg. I/17	Acceptance of certificates	
Reg. I/21(b)	Casualties – reporting	
Reg. IV/5	Provision of radiocommunication services and communication of information on such provision	
Reg. IV/5-1	Global maritime distress and safety system identities – ensuring suitable arrangements	
Reg. V/5	Meteorological services and warnings	
Reg. V/6	Ice Patrol Service	
Reg. V/10	Ships' routeing	
Reg. V/11	Ship reporting systems	
Reg. V/12	Vessel traffic services	
Reg. V/13	Establishment and operation of aids to navigation	
Reg. V/31.2	Danger messages – bring to the knowledge of those concerned and communicate to other interested Governments	
Reg. V/33.1-1	Distress situations: obligations and procedures – coordination and cooperation	
Reg. VI/1.2	Appropriate information on safe carriage of cargoes	
Reg. VII/2.4	Issue of instructions on emergency response, etc.	
Reg. VII/7-1	Issue of instructions on emergency response, etc.	
MARPOL		
Art. 1	General obligations under the Convention	and Art. I of MARPOL PROT 78
Art. 4(2) and (4)	Violation	

	OBLIGATIONS OF CONTRACTING GOVERNMENTS/PARTIES	
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Art. 5(1)	Certificates and special rules on inspection of ships – acceptance of certificates	
Art. 5(4)	Certificates and special rules on inspection of ships – no more favourable treatment	
Art. 6(1)	Detection of violations and enforcement of the Convention – cooperation	
Art. 6(3)	Detection of violations and enforcement of the Convention – furnishing evidence	
Art. 7	Undue delay to ships	
Art. 8	Reports on incidents involving harmful substances	
Art. 11	Communication of information	
Art. 12(2)	Casualties to ships – information to IMO	
Art. 17	Promotion of technical co-operation	
Annex I		
Reg. 8	Issue or endorsement of a certificate by another Government	
Reg. 15.7	Control of discharge of oil – investigations (Machinery spaces)	
Reg. 34.7	Control of discharge of oil – investigations (Cargo area)	
Reg. 38.3 <i>bis</i> and 38.4 <i>bis</i>	Consultation with IMO for circulation of information regarding reception facilities by Parties participating in regional arrangements	
Annex II		
Reg. 6.3	Categorization and listing of noxious liquid substances and other substances – establish and agree on provisional assessment and notify IMO	
Reg. 9.3.1, 9.3.2, 9.3.3 and 9.3.4	Issue or endorsement of a certificate by another Government	

	OBLIGATIONS OF CONTRACTING GOVERNMENTS/PARTIES	
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Reg. 13.4	Control of discharges of residues – exemption for a pre-wash	
Reg. 18.2 <i>bis</i> and 18.2 <i>ter</i>	Consultation with IMO for circulation of information regarding reception facilities by Parties participating in regional arrangements	
Reg. 18.3	Reception facilities and cargo unloading terminal arrangements – agree and establish a date, notify IMO	
Annex III		
Reg. 1(3)	Application – issue detailed requirements	
Annex IV		
Reg. 6	Issue or endorsement of a certificate by another Government	
Reg. 12.1 <i>bis</i>	Consultation with IMO for circulation of information regarding reception facilities by Parties participating in regional arrangements	
Annex V		
Reg. 8.2 <i>bis</i>	Consultation with IMO for circulation of information regarding reception facilities by Parties participating in regional arrangements	
Annex VI		
Reg. 7	Issue or endorsement of a certificate by another Government	Addition related to IECC by MEPC.203(62)
Regs. 9.9.3 and 9.11.2	Transfer of flag – transmitting copies of the certificate and the relevant survey report	
Reg. 11.1	Detection of violations and enforcement – cooperation	
Reg. 11.2	Inspection report in case of detection of violations	
Reg. 11.3	Detection of violations and enforcement – information to flag State and master on violations detected	

	OBLIGATIONS OF CONTRACTING GOVERNMENTS/PARTIES	
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Reg. 11.5	Transmission of report to requesting Party	
Reg. 13.7.1	Certification of an Approved Method and communication to IMO	
Reg.17.1	Adequate Reception Facilities	
Reg. 17.1 <i>bis</i>	Consultation with IMO for circulation of information regarding reception facilities by Parties participating in regional arrangement	
Reg. 17.3	Reception Facilities unavailable or inadequate – communication to IMO	
Reg. 18.1	Availability of fuel oils and communication to IMO	
Reg. 18.2.1	Ship not compliant with fuel oil standards	
Reg. 18.2.3	Action taken, including not taking control measures	
Reg. 18.2.5	Evidence of the non-availability of compliant fuel oil – communication to IMO	
Reg. 18.9	Authorities designated for register of local suppliers, bunker delivery note and sample, fuel oil quality, actions against fuel oil suppliers of non-compliance, informing the Administration of any ship receiving non-compliant fuel oil and communication to IMO of non-compliant fuel oil suppliers as referred to in the paragraph	
ISM Code Para 14.3	Extension of validity of Interim SMC by another Contracting Government	
1994 HSC Code Para 1.8.2 Para 14.2.1.12 Para 14.2.1.13	 Issue of certificates by another Government Definition of "sea area A1" Definition of "sea area A2"	 as may be defined as may be defined
2000 HSC Code Para 1.8.2	 Issue of certificates by another Government	

	OBLIGATIONS OF CONTRACTING GOVERNMENTS/PARTIES	
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Para 14.2.1.13	Definition of "sea area A1"	as may be defined
Para 14.2.1.14	Definition of "sea area A2"	as may be defined
IMDG Code		
Section 1.3.1	Training of shoreside personnel – establishment of period for keeping records of training	
Section 1.5.2	Radiation protection programme – role of Competent Authority	
Section 1.5.3	Quality assurance programmes – role of Competent Authority	
Chapter 3.3	Approval of metal hydride storage system(s) installed in conveyances or in completed conveyance components or intended to be installed in conveyances	
Chapter 4.1	Approval of packagings as referred to in the Chapter – role of Competent Authority	
Section 5.1.5	General provisions for class 7 – role of Competent Authority	
Chapter 5.5	Determining the period between fumigant application and loading of fumigated cargo transport unit on board the ship	
Chapter 6.2	Approval of pressure receptacles, aerosol dispensers, small receptacles containing gas and fuel cell cartridges containing liquefied flammable gas – role of Competent Authority	
Section 6.2.2.6.2	General provisions – role of Competent Authority	
Section 6.3.2	Quality assurance programme – role of Competent Authority	
Section 6.3.5	Procedures for performance and frequency of tests – role of Competent Authority	
Chapter 6.4	Approval of package design and materials for class 7 – role of Competent Authority	

	OBLIGATIONS OF CONTRACTING GOVERNMENTS/PARTIES	
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Section 6.5.4	Testing, certification and inspection – role of Competent Authority	
Chapter 6.6	Provisions for the construction and testing of large packagings – role of Competent Authority	
Chapter 6.7	Provisions for the design, construction, inspection and testing of portable tanks and multiple-element gas containers – role of Competent Authority	
Chapter 6.8	Provisions for road tank vehicles – role of Competent Authority	
Section 7.1.14	Stowage of goods of class 7 – role of Competent Authority	
Chapter 7.9	Exemptions, approvals and certificates – notification to IMO and recognition of approvals and certificates	
Casualty Investigation Code		
Para 4/4.1	Detailed contact information of the marine safety investigation Authority(ies) to IMO	
Paras 5/5.1 and 5.2	Notification of a marine casualty	
Paras 7/7.1 and 7.2	Agreement to conduct a marine safety investigation	
Para 8/8.1	Powers provided for investigator(s)	
Para 9/9.2	Coordination for parallel investigations	
Para 10/10.1	Cooperation in investigating	
Para 11/11.1	Investigation not to be subject to external direction	
Paras 13/13.1,13.4 and 13.5	Draft marine safety investigation reports	

	OBLIGATIONS OF CONTRACTING GOVERNMENTS/PARTIES	
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Paras 14/14.1 and 14.2	Marine safety investigation reports – communication to IMO	
Para 14/14.4	Marine safety investigation reports – available to public and shipping industry	
IBC Code		
Para 1.5.3	Maintenance of conditions after survey	
Para 1.5.5.1	Issue or endorsement of International Certificate of Fitness by another Government	
BCH Code		
Para 1.6.4.1	Issue or endorsement of certificate by another Government	
IGC Code		
Para 1.5.5.1	Issue or endorsement of certificate by another Government	
STCW Code, part A		
Section A-I/6.1	Training and assessment of seafarers for certification	
Section A-I/6.3	Qualifications of instructors, supervisors and assessors	
Section A-I/6.7	Training and assessment within an institution	
Section A-I/7.2	Communication of information – initial communication (within one year of entry into force of regulation I/7)	
Section A-I/7.3, 7.4 and 7.5	Communication of information – subsequent reports (within the periods as referred to in paragraphs 7.3, 7.4 and 7.5)	
Section A-I/8.1 and 8.3	National objectives and quality standards	
Section A-I/9.1	Medical standards – eyesight standards, physical and medical fitness	

	OBLIGATIONS OF CONTRACTING GOVERNMENTS/PARTIES	
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Section A-I/9.4	Provisions for recognizing medical practitioners and maintenance of a register of recognized medical practitioners	
Section A-I/9.5 and 9.6	Guidance, processes and procedures for the conduct of medical fitness examinations and issuance of medical certificates	
Section A-I/12.1	General performance standards for simulators used in training	
Section A-I/12.2	General performance standards for simulators used in assessment of competence	
Section A-I/12.6	Simulator training objectives	
Section A-I/12.9	Qualification of instructors and assessors	
Section A.VIII/2.9	Watchkeeping at sea – directing the attention of companies, masters, chief engineer officers and watchkeeping personnel to observe principles in parts 4-1 and 4-2	

* * *

ANNEX 2

SPECIFIC FLAG STATE OBLIGATIONS

The following table contains a non-exhaustive list of obligations, including those obligations imposed when a right is exercised.

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
TONNAGE 69		
Art. 6	Determination of tonnages	
Art. 7(2)	Issue of certificates	
Annex I, reg. 1(3)	Novel types of craft – determination of tonnage and communication to IMO on method used	
Annex I, reg. 5(3)(b)	Change of net tonnage – Alterations or modifications deemed by the Administration to be of a major character	
Annex I, reg. 7	Measurement and calculation	
LL 66 and LL PROT 88²		
	Existing certificates	LL PROT 88 only (Art.II-2)
Art. 6(3)	Exemptions – reporting	
Art. 8(2)	Equivalents – reporting	
Art. 9(2)	Approvals for experimental purposes – reporting	
Art. 13	Surveys and marking	amended by LL PROT 88
Art. 14	Initial, renewal and annual survey	amended by LL PROT 88
Art. 16(3)	Issue of certificates	
Art. 19	Duration and validity of certificate	amended by LL PROT 88
Art. 23	Casualties	

² When the obligation does not derive from the International Convention on Load Lines, 1966, but solely from the Protocol of 1988 relating thereto, this is indicated in the "Comments" column.

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Annex I, reg. 1	Strength of hull	
	Strength and intact stability of ships	LL PROT 88 only (Annex I, reg. 1)
Annex I, reg. 2	Application – Assignment of freeboard	amended by LL PROT 88
	Authorization of recognized organizations	LL PROT 88 only (Annex I, reg. 2-1)
Annex I, reg. 8	Details of marking	
Annex I, reg. 10	Stability information – approval	amended by LL PROT 88
Annex I, reg. 12	Doors	amended by LL PROT 88
Annex I, reg. 14	Cargo and other hatchways	amended by LL PROT 88
Annex I, reg. 15	Hatchways closed by portable covers and secured weather tight by tarpaulins and battering devices	amended by LL PROT 88
Annex I, reg. 16(1)	Hatchway coamings – reduced heights	amended by LL PROT 88 (Annex I, reg. 14-1(2))
Annex I, reg. 16(4)	Securing arrangements	amended by LL PROT 88 (Annex I, reg. 16(6))
	Machinery space openings	LL PROT 88 only (Annex I, reg. 17(4))
Annex I, reg. 19	Ventilators	amended by LL PROT 88
Annex I, reg. 20	Air pipes	amended by LL PROT 88
	Cargo ports and other similar openings – applicable national standards	LL PROT 88 only (Annex I, reg. 21(5))
Annex I, reg. 22	Scuppers, inlets and discharges	amended by LL PROT 88
Annex I, reg. 25	Protection of the crew	amended by LL PROT 88
Annex I, reg. 27	Freeboards – Types of ships	amended by LL PROT 88
Annex I, reg. 28	Freeboard tables	amended by LL PROT 88
Annex I, reg. 39	Minimum bow height and reserve buoyancy	amended by LL PROT 88
	Lashing system	LL PROT 88 only (Annex I, reg. 44(6))

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
COLREG 72		
Annex I, paragraph 14	Approval of construction of lights and shapes and the installation of lights on board	
Annex III, paragraph 3	Approval of construction, performance and installation of sound signal appliances on board	
STCW 78		
Art. VI	Certificates	
Art. VIII(3)	Dispensation – reporting	
Art. IX(2)	Equivalents – reporting	
Reg. I/2.1, 2.2, 2.7 and 2.8	Issuance and endorsements of certificate of competency	
Reg. I/10.1 and 10.2	Recognition of certificates and seafarer's knowledge of the maritime legislation	
Reg. I/11.6	Availability – recent changes in national and international regulations	
Reg. I/13.3	Conduct of trials – safety, security and pollution prevention	
Reg. I/13.5 and 13.8.1	Results of trials – Communication	
Reg. I/13.7	Respect objections to particular trials	
Reg. I/13.8	Respect objections by other Parties when authorizing ships to continue to operate with the system under trial	
Reg. I/14.1	Responsibilities of companies	
Reg. IV/1.2	Application – appropriate certificates for radio operators	

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Reg. V/1.7	Mandatory minimum requirements for the training and qualification of masters, officers and ratings on oil and chemical tankers	
Reg. V/1-2.5	Mandatory minimum requirements for the training and qualification of masters, officers and ratings on liquefied gas tankers	
Reg. V/2.1	Applicability of the requirements on domestic voyages	
Reg. V/2.8	Mandatory minimum requirements for the training and qualification of masters, officers, ratings and other personnel on passenger ships	
Reg. VIII/1.1 and 1.2	Fitness for duty – preventing fatigue and preventing drug and alcohol abuse	
Reg. VIII/2.1 and 2.2	Watchkeeping arrangements and principles – direction and requirements	
SOLAS 74		
Reg. I/4(b)	Exemptions – reporting	in SOLAS PROT 78 and SOLAS PROT 88
Reg. I/5(b)	Equivalents – reporting	
Reg. I/6	Inspection and survey	
Reg. I/7	Survey of passenger ships	
Reg. I/8	Survey of life-saving appliances and other equipment of cargo ships	
Reg. I/9	Survey of radio installations of cargo ships	
Reg. I/10	Survey of structure, machinery and equipment of cargo ships	
Reg. I/12	Issue of certificates	in SOLAS PROT 88
	Issue and endorsement of certificates	in SOLAS PROT 88
Reg. I/14	Duration and validity of certificates	in SOLAS PROT 88

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Reg. I/15	Forms of certificates and records of equipment	in SOLAS PROT 88
Reg. I/18	Qualification of certificates	revised SOLAS chapter II-1 adopted by MSC 80 and MSC 82
Reg. I/21	Casualties	
Reg. II-1/1.2	Compliance with earlier requirements	
Reg. II-1/3-2	Approval of corrosion prevention systems of seawater ballast tanks	
Reg. II-1/3-2.4	Maintenance of the protective coating	
Reg. II-1/3-3.2	Approval of means of access to tanker bows	
Reg. II-1/3-4.1.2.2 and 3-4.1.3	Approval of emergency towing arrangements on tankers	
Reg. II-1/3-6.2.3	Means of access to cargo and other spaces – satisfaction of the Administration as well as survey	
Reg. II-1/3-6.4.1	Approval of Ship Structure Access Manual	
Reg. II-1/3-8.3	Appropriate requirements for towing and mooring equipment	
Reg. II-1/3-9.1	Means of embarkation and disembarkation	
Reg. II-1/4.2	Alternative methodologies – communication to IMO	
Reg. II-1/4.4	Beneficial or adverse effects of fitting structures as defined by the regulation	
Reg. II-1/5-1.1	Stability information to the Administration	
Reg. II-1/7-2.5	Acceptance to equalization devices and their control	
Reg. II-1/13.9.2	Number and arrangements of doors with a device preventing unauthorized opening	

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Reg. II-1/13.11.2	Special consideration for tunnels piercing watertight bulkheads	
Reg. II-1/15.2	Arrangement and efficiency of the means for closing any opening in the shell plating	
Reg. II-1/15.6	Special sanction for automatic ventilating sidescuttles	
Reg. II-1/15.8.5	Material of pipes as referred to in the regulation	
Reg. II-1/16.1.1	Construction and initial tests of watertight doors, sidescuttles, etc.	
Reg. II-1/16.1.1	Construction and initial tests of watertight decks, trunks, etc.	
Reg. II-1/17-1.2	Indicators for closing appliances that could lead to flooding of a special category space or ro-ro space	
Reg. II-1/19.3 and 19.4	Damage control information – General and specific precautions	
Reg. II-1/22.4	Determination for watertight doors permitted to remain open	
Reg. II-1/26.2	Consideration of reliability of single essential propulsion components	
Reg. II-1/29.1, .2.1 and .6.3	Steering gear	
Reg. II-1/29.17.2	Adoption of regulations on rudder actuators for tankers, chemical tankers and gas carriers	
Reg. II-1/35-1.3.7.2 and 3.9	Bilge pumping arrangements	
Reg. II-1/40.2	Electrical installations – ensuring uniformity	
Reg. II-1/42.1.3	Emergency source of electrical power in passenger ships	
Reg. II-1/43.1.3	Emergency source of electrical power in cargo ships	

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Reg. II-1/44.2	Approval of automatically starting emergency generating sets	
Reg. II-1/45.3.3, 45.5.3, 45.5.4, 45.9.3, 45.10, and 45.11	Precautions against shock, fire and other hazards of electrical origin	
Reg. II-1/46.2 and .3	Additional requirements for periodically unattended machinery space	
Reg. II-1/53.1	Special requirements for machinery, boiler and electrical installations	
Reg. II-1/55.3, 55.4.1 and 55.6	Evaluation of the alternative design and arrangements and re-evaluation due to change of conditions	
Reg. II-1/55.5	Alternative design and arrangements – communication to IMO	
Reg. II-2/1.2.1	Approval of fire protection arrangements in existing ships	
Reg. II-2/1.6.2.1.2 and 1.6.6	Application of requirements for tankers	
Reg. II-2/4.2.2.5.1	Approval of material for oil fuel pipes and their valves and fittings	
Reg. II-2/4.3	Approval of gaseous fuel systems used for domestic purposes	
Reg. II-2/4.5.1.4.4	Installation of cargo oil lines where cargo wing tanks are provided	
Reg. II-2/4.5.3.3	Requirements for safety devices in venting systems	
Reg. II-2/4.5.5.2.1	Requirements for inert gas system on chemical tankers	see reg. II-2/4.5.5.3.1 see reg. II-2/8.3.3 and II-2/9.5.2.3
Reg. II-2/4.5.6.3	Arrangements for inerting, purging or gas-freeing	
Reg. II-2/5.2.2.5	Positioning of controls for any required fire-extinguishing system in passenger ships	

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Reg. II-2/5.2.3.1	Special consideration to maintaining the fire integrity of periodically unattended machinery spaces	
Reg. II-2/7.3.2	Initial and periodical tests	see reg. II-2/11.2
Reg. II-2/7.6	Protection of cargo spaces in passenger ships	
Reg. II-2/8.3.4	Release of smoke from machinery spaces – passenger ships	
Reg. II-2/9.2.2.1.5.1	Approval of equivalent means of controlling and limiting a fire on ships designed for special purposes	
Reg. II-2/9.2.2.3.1	Fire integrity of bulkheads and decks in ships carrying more than 36 passengers	
Reg. II-2/9.2.2.4.4, 9.2.3.3.4 and 9.2.4.2.4	Fire integrity of bulkheads and decks	
Reg. II-2/9.3.4	Approval of structural fire protection details, taking into account the risk of heat transmission	
Reg. II-2/9.5.2.4	Protection of openings in machinery space boundaries	
Reg. II-2/10.2.1.2.1.3	Provisions for fixed water fire-extinguishing arrangements for periodically unattended machinery spaces	
Reg. II-2/10.2.1.2.2.1	Ready availability of water supply	
Reg. II-2/10.2.3.1.1	Approval of non-perishable material for fire hoses	
Reg. II-2/10.2.3.2.1	Number and diameter of fire hoses	
Reg. II-2/10.3.2.1	Arrangement of fire extinguishers	
Reg. II-2/10.6.1.1	Type approval of automatic sprinkler, fire detection and fire alarm system	
Reg. II-2/10.6.3.2	Approval of fire-extinguishing arrangement for flammable liquid lockers	

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Reg. II-2/10.7.1.2	Fixed gas fire-extinguishing systems for general cargo	
Reg. II-2/10.7.1.4	Issue of an Exemption Certificate	
Reg. II-2/13.3.1.4	Provision of means of escape from, or access to, radiotelegraph stations	
Reg. II-2/13.3.2.5.1	Lighting or photoluminescent equipment to be evaluated, tested and applied in accordance with the FSS Code	
Reg. II-2/13.3.2.6.2	Normally locked doors that form part of an escape route – Quick release mechanisms	
Reg. II-2/13.5.1	Means of escape on passenger ships from special category and open ro-ro spaces to which any passengers carried can have access	
Reg. II-2/17.4.1 and 17.6	Evaluation and approval of the engineering analysis for alternative design and arrangements for fire safety	
Reg. II-2/17.5	Alternative design and arrangements for fire safety – communication of information to IMO	
Reg. II-2/19.4	Provision of document of compliance	
Reg. II-2/20.4.1	Provision and approval of fixed fire detection and fire alarm systems	
Reg. II-2/20.6.1.4.2	Adverse effect as referred to in the regulation – Approval of stability information	
Reg. II-2/21.5.2	Alternate space for medical care	
Reg. III/4	Evaluation, testing and approval of life-saving appliances and arrangements	
Reg. III/5	Production tests for life-saving appliances	
Reg. III/20.8.1.2	Approval of servicing stations	
Reg. III/20.8.5	Extension of liferaft service intervals – notification to IMO	

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Reg. III/20.11.1 and 20.11.2	Periodic servicing of launching appliances and on-load release gear – thorough examination at the annual surveys	
Reg. III/26.2.4	Approval of liferafts on ro-ro passenger ships	
Reg. III/26.3.1 and 26.3.2	Approval of fast rescue boats and their launching appliances on ro-ro passenger ships	
Reg. III/28	Approval of helicopter landing and pick-up areas on ro-ro passenger ships	
Reg. III/38.3, 38.4.1 and 38.6	Evaluation of the alternative design and arrangements and re-evaluation due to change of conditions	
Reg. III/38.5	Alternative design and arrangements – communication to IMO	
Reg. IV/3.3	Exemptions – reporting to IMO	
Reg. IV/14.1	Type approval of radio equipment	
Reg. IV/15.5	Ensure radio equipment is maintained	
Reg. IV/16.1	Radio personnel	
Reg. IV/17	Radio records	
Reg. V/3.3	Exemptions and equivalents – reporting to IMO	
Reg. V/14	Ships' manning	
Reg. V/16	Maintenance of equipment	
Reg. V/17	Electromagnetic compatibility	
Reg. V/18.1	Type approval of navigational systems and equipment and voyage data recorder	
Reg. V/18.5	Requirement for quality control system at manufacturers	
Reg. V/23.3.3.1.3	Pilot transfer arrangements	
Reg. V/23.6.1	Type approval of mechanical pilot hoists	

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Reg. VI/3.1 and 3.2	Provision of equipment for oxygen analysis and gas detection and training of crews in their use	
Reg. VI/5.6	Approval of Cargo Securing Manual	
Reg. VI/6	Acceptability for shipment	
Reg. VI/9.2	Grain loading information	
Reg. VII/5	Approval of Cargo Securing Manual	
Reg. VII/15.2	Warships – INF cargo	
Reg. VIII/4	Approval of design, construction and standards of inspection and assembly of reactor installations	
Reg. VIII/6	Ensure radiation safety	
Reg. VIII/7(a)	Approval of safety assessment	
Reg. VIII/8	Approval of operating manual	
Reg. VIII/10(f)	Issue of certificates	
Reg. IX/4.1	Issue of Document of Compliance (DOC)	
Reg. IX/4.3	Issue of Safety Management Certificate (SMC)	
Reg. IX/6.1	Periodical verification of the safety management system	
Reg. XI-1/1	Authorization of recognized organizations	
Reg. XI-1/2	Enhanced surveys	
Reg. XI-1/3.5.4	Ship identification number – approval of method of marking	
Reg. XI-1/3-1.2	Registered owner identification number	
Reg. XI-1/5.3	Issue of Continuous Synopsis Record (CSR)	
Reg. XI-1/5.4.2	Amendments to CSR	
Reg. XI-1/5.4.3	Authorize and require changes to be made to CSR	

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Reg. XI-1/5.8	Former flag State to send CSR to new flag State	
Reg. XI-1/5.9	Append previous CSR to new CSR	
Reg. XI-1/6	Investigations of marine casualties and incidents	
Reg. XII/8.1	Endorsement of booklet required by reg. VI/7.2	
Reg. XII/9.2	Approval of bilge well high water level alarms	
Reg. XII/11.3	Loading instrument – approval of software for stability calculations	
MARPOL		
Art. 4(1) and (3)	Violation	
Art. 6(4)	Detection of violations and enforcement of the Convention – investigations	
Art. 12(1)	Casualties to ships – investigations	
Annex I		
Reg. 2.6.2	Application – an oil tanker delivered on or before 1 June 1982 engaged in specific trades: agreement with port States	
Reg. 3.3	Exemptions and waivers – reporting	
Reg. 4.3	Exceptions – discharge of substances containing oil for the purpose of combating pollution incidents	
Reg. 5.2	Equivalents – reporting	
Reg. 6	Surveys	
Reg. 7	Issue or endorsement of certificate	
Reg. 10.9.3	Transfer of flag	

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Reg. 12A.12	Oil fuel tank protection – approval of the design and construction of ships	
Reg. 14.3	Oil filtering equipment – volume of oil bilge holding tank	
Reg. 14.4	Oil filtering equipment – ships of less than 400 gross tonnage	
Reg. 14.6 and 14.7	Oil filtering equipment – approval	
Reg. 15.6.2	Control of discharge of oil – ships of less than 400 gross tonnage: design approval	
Reg. 18.8.2, 18.8.3 and 18.8.4	Requirements for product carriers of 40,000 tonnes deadweight and above – arrangement and operation, approval of oil content meter, clean ballast tank operational manual	
Reg. 18.10.1.1	Segregated ballast tanks – oil tanker delivered on or before 1 June 1982 having special ballast arrangements: approval	
Reg. 18.10.1.2	Segregated ballast tanks – oil tanker delivered on or before 1 June 1982 having special ballast arrangements: agreement with port States	
Reg. 18.10.3	Segregated ballast tanks – oil tanker delivered on or before 1 June 1982 having special ballast arrangements: communication to IMO	
Reg. 20.8.1	Double hull and double bottom requirements for oil tankers delivered before 6 July 1996 – communication to IMO	
Reg. 21.8.1	Prevention of oil pollution from oil tankers carrying heavy grade oil as cargo – communication to IMO	
Reg. 23.3.1	Accidental oil outflow performance – Calculation of mean oil outflow parameter	
Reg. 25.5	Hypothetical outflow of oil – information to IMO on accepted arrangements	
Reg. 27.3	Intact stability – approval of written procedures for liquid transfer operation	

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Reg. 28.3.4	Subdivision and damage stability – sufficient stability during flooding	
Reg. 29.2.1	Slop tanks – approval	
Reg. 30.6.5.2	Pumping, piping and discharge arrangement – establishment of requirements	
Reg. 30.7	Pumping, piping and discharge arrangement – positive means of loading, transporting or discharging cargo	
Reg. 31.2 and 31.4	Oil discharge monitoring and control system – approval	
Reg. 32	Oil/water interface detector – approval	
Reg. 33.1	Crude oil washing requirement – compliance with requirement	
Reg. 33.2	Crude oil washing requirements – establishment of requirements	
Reg. 35.1	Crude oil washing operations – Operations and Equipment Manual	
Reg. 36.9	Oil Record Book, Part II – development of oil record book for ships of less than 150 gross tonnage	
Reg. 37.1	Shipboard oil pollution emergency plan – approval	
Reg. 38.7.2	Reception facilities within special areas: Antarctic area – sufficient capacity	
Reg. 38.8	Reception facilities – Notification on alleged inadequacies of port reception facilities	
Reg. 39.2.2	Special requirements for fixed or floating platforms – approval of record form	
Reg. 41.1	Oil tankers Ship to Ship (STS) operations Plan to be approved	

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Annex II		
Reg. 3.1.3	Exceptions – approval of discharge of NLS for the purpose of combating pollution incidents	
Reg. 4.1.2	Exemptions – communication to IMO on relaxations	
Reg. 4.3.4	Exemptions – communication to IMO	
Reg. 4.4.5	Exemptions – communication to IMO	
Reg. 5.1	Equivalents – substitution of operational method	
Reg. 5.2	Equivalents – communication to IMO on alternatives	
Reg. 5.3.4 and 5.3.5	Equivalents – pumping and piping arrangement, approval of manual	
Reg. 6.3	Establishment of Tripartite Agreements – Notification to IMO	
Reg. 8	Surveys	
Reg. 9	Issue or endorsement of certificates	
Reg. 10.7	Expiry date of existing certificate	
Reg. 10.9.3	Transfer of flag	
Reg. 11.2	Design, construction, equipment and operations – establishment of appropriate measures	
Reg. 12.5	Pumping, piping, unloading arrangements and slop tanks – approval of pumping performance test	
Reg. 13.3	Control of discharges of residues of NLS – approval of ventilation procedure	
Reg. 13.5	Control of discharges of residues of NLS – approval of tank washing procedure	

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Reg. 14.1	Procedures and arrangements manual – approval	
Reg. 17.1	Shipboard marine pollution emergency plan for NLS – approval	
Reg. 18.5	Notification on alleged inadequacies of port reception facilities	
Annex IV		
Reg. 4	Surveys	
Reg. 5	Issue or endorsement of certificates	
Reg. 8.8.2	Transfer of flag	
Reg. 9.1	Approval of sewage systems	
Reg. 9.2	Approval of sewage systems (passenger ships operating in special areas)	
Reg. 11.1.1	Approval of rate of discharge	
Reg. 12.2	Notification on alleged inadequacies of port reception facilities	
Annex V		
Reg. 6.3.2	Sufficient capacity for the retention of all garbage on board ships before entering the Antarctic area	
Reg. 8.2	Notification on alleged inadequacies of port reception facilities	
Annex VI		
Reg. 3.2 and 3.3.2	Exceptions and exemptions	Addition related to IEEC MEPC.203(62) Addition related to IEEC by MEPC.203(62)
Reg. 4.2 and 4.4	Equivalents and communication to IMO	
Reg. 5	Surveys and certification	
Reg. 6	Issue or endorsement of Certificate	

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Reg. 9.1 and 9.10	Duration and validity of certificate	Addition related to IEEC by MEPC.203(62)
Reg. 9.9.3	Transfer of flag	
Reg. 11.4	Detection of violations and enforcement – investigations and communication to the Party and IMO	
Reg. 12.6	Ozone Depleting Substances Record Book – approval of alternative forms of record keeping	
Reg. 13.1.1.2 and 13.1.2.2)	Nitrogen oxides – Acceptance of identical replacement and alternative control measures	
Reg. 13.2.2	Acceptance of installation of Tier II engine in lieu of Tier III where Tier III engine could not be accommodated	
Reg. 13.5.2.2	Combined nameplate diesel engine – application as referred to in the paragraph	
Reg. 13.7.2	Approved method not commercially available	
Reg. 14.6	Sulphur oxides – prescription of logbook	
Reg. 15.5	Volatile organic compounds – approval of vapour collection systems	Refer to Reg. 19.4
Reg. 15.6	VOC Management Plan – approval	
Reg. 16.6.1	Shipboard incineration – approvals	
Reg. 19.6	Information regarding application, suspension, withdrawal or declining of waiving the requirements of Reg. 20 (in accordance with Reg.19.4) – communication to the Organization	
Reg. 23	Cooperation with other parties – promotion of development – transfer of technology, exchange of information relating to the improvement of energy efficiency of ships	
Appendix IV, para 1	Type approval as referred to in the paragraph	

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Appendix VI, para 1.2, para 2.1 and para 3.1	Fuel verification procedure – management and sample delivery	
Res. MSC.133(76), as amended	Technical provisions for means of access for inspections	
Para 3.7	Vertical or spiral ladders – acceptance	
Para 3.9.7	Other means of access – approval and acceptance	
Res. A.739(18), as amended	Guidelines for the authorization of organizations acting on behalf of the Administration	
Para 2	Assignment of authority	
Para 3	Verification and monitoring	
ISM Code		
Para 13.2	Issue of DOC	
Para 13.4	Annual verification (DOC)	
Para 13.5	Withdrawal of DOC	
Para 13.7	Issue of SMC	
Para 13.8	Intermediate verification (SMC)	
Para 13.9	Withdrawal of SMC	
Para 14.1	Issue of Interim DOC	
Para 14.2	Issue of Interim SMC	
Para 14.4	Verification required for issuance of an Interim SMC	
Para 15.1	Verification – acceptance of procedures	
Para 16	Forms of certificates	
INF Code		
Para 1.3.2	Issue of certificate	

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Para 2.1	Damage stability (INF.1 ship)	
Para 3.1	Fire safety measures (INF.1 cargo)	
Para 4.1.3	Temperature control of cargo spaces (INF.1, 2 and 3 ship)	
Para 6.2	Safe stowage and securing – approval of principles	
Para 7.1	Electrical power supplies (INF.1 ship)	
Chapter 8	Radiological protection	
Chapter 9	Management and training	
Para 10.2	Shipboard emergency plan – approval	
FSS Code		
Para 1/4	Use of toxic extinguishing media	
Para 4/2	Type approval of fire extinguishers	
Para 4/3.1.1.2	Determine equivalents of fire extinguishers	
Para 4/3.2.2.2	Approval of foam concentrate	
Para 5/2.1.1.4	Containers for the storage of fire-extinguishing medium, etc.	
Para 5/2.1.2.1	System flow calculations	
Para 5/2.1.2.3	Spare parts	
Para 5/2.3	Steam systems	
Para 5/2.5	Equivalent systems – approval	
Paras 6/2.2.1.1 and 6/2.3.1.1	Foam concentrates – approval	
Para 7/2.1	Fixed pressure water-spraying fire-extinguishing systems – approval	
Para 7/2.2	Equivalent systems – approval	
Para 7/2.3	Fixed pressure water-spraying fire-extinguishing systems for cabin balconies – approval	

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Para 8/2.1.2	Equivalent sprinkler systems – approval	
Para 9/2.3.1.2	Sensitivity limits of smoke detectors in other spaces	
Para 9/2.3.1.3	Heat detectors temperature limits	
Para 9/2.3.1.7	Fixed fire detection and fire alarm systems for cabin balconies – approval	
Para 9/2.4.1.3	Limiting the number of enclosed spaces included in each section	
Para 9/2.5.2	Testing on ships with self-diagnostic system – determination of requirements	
Para 10/2.1.2	Sequential scanning – overall response time	
Para 10/2.2.2	Extractor fans – overall response time	
Para 10/2.3.1.1	Means to isolate smoke accumulators	
Para 11/2.1	Low-location lighting – approval	
Para 14/2.2.1.2	Medium expansion ratio foam – application rate, etc.	
Para 15/2.1.2	Inert gas systems – approval	
Para 15/2.2.4.6	Adequate reserve of water	
2010 FTP Code		
Para 4.2	Recognition of testing laboratories	
Para 5.1.1 and 5.1.2	Approval of products in accordance with established approval procedures or authorization of competent authorities to issue approvals	
Para 5.2.2	Requirements for manufacturers – quality control system audited by a competent authority – or alternatively use of final product verification procedures as referred to in the paragraph	
Para 7.2	Use of equivalents and modern technology – communication of information to the	

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Annex 1, part 3/3.3	Organization	
Annex 1, part 3 appendix 1, para 2.3.2.9	Structural core of a material other than steel or aluminium alloy – decision on limits for rise in temperature Insulation system of 'A' class door – approval to the same standard as the door	
LSA Code		
Para 1.2.3	Determine the period of acceptability of LSAs subject to deterioration with age	
Para 4.4.1.2	Endorsement of lifeboat affixed approval plate	
Para 4.5.4	Fixed two-way VHF radiotelephone apparatus – sheltered space	
Para 5.1.1.4	Rescue boats – combination of rigid and inflatable construction	
Para 5.1.3.8	Rubbing strips on inflated rescue boats	
Paras 6.1.2.9 and 6.1.2.10	Lowering speed of a fully equipped liferaft	
Para 6.2.1.2	MES – strength and construction of passage and platform	
Para 7.2.2.1	Broadcast of messages from other places on board	
1994 HSC Code		
Para 1.3.5	Verification	
Para 1.4.29	Determination of "maximum operational weight"	
Para 1.5.1.2	Specifying intervals for renewal surveys	
Para 1.5.4	Inspection and survey	
Para 1.5.5	Recognized organizations and nominated surveyors	

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Para 1.5.7	Completeness of survey and inspection	
Para 1.8.1	Issue/endorsement of certificate	
Para 1.9.2	Issue of permit to operate	
Para 1.11.2	Equivalents – reporting	
Para 1.12.1	Adequate information and guidance provided to the craft by the company	
Paras 1.13.2 and 1.13.3	Novel designs	
Para 1.14.1	Investigation reports to IMO	
Paras 2.7.4 and 2.14.2	Inclining and stability information – approval	
Para 3.4	Determination of service life	
Para 3.5	Design criteria	
Para 4.8.3	Documentation and verification of evacuation time	
Para 7.5.6.3	Safe outlets for exhaust fans in fuel tank spaces	
Para 7.7.2.3.2	Sensitivity limits of smoke detectors	
Para 7.7.6.1.5	Additional quantity of fire-extinguishing medium	
Para 7.7.6.1.12	Containers for the storage of fire-extinguishing medium, etc. – design	
Para 7.7.8.5	Maximum length of fire hoses	
Para 8.1	Approval and acceptance of LSA and arrangements	
Para 8.9.1.2	Approval of novel life-saving appliances or arrangements	
Para 8.9.1.3	Notification to the Organization	
Para 8.9.7.1.2	Approval of servicing stations	

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Para 8.9.7.2	Deployment intervals of MES	
Para 8.9.11	Novel life-saving appliances or arrangements	
Para 8.9.12	Notification to the Organization	
Para 10.2.4.9	Flexible oil fuel pipes	
Para 10.3.7	Internal diameters of suction branches	
Para 12.6.2	Specified voltages to earth	
Para 13.1.2	Navigational equipment and its installation	
Para 13.13	Approval of systems, equipment and performance standards	
Para 14.3.3	Exemptions – reporting	
Para 14.13.1	Type approval	
Para 14.14.5	Ensuring maintenance	
Para 14.15	Radio personnel	
Para 14.16	Radio records	
Para 15.3.1	Operating station – field of vision	
Para 15.7.2	Ensuring clear view through windows	
Para 17.8	Acceleration and deceleration	
Para 18.1.4	Determining maximum allowable distance from a base port or place of refuge	
Para 18.2	Craft documentation	
Paras 18.3.1 to 18.3.7	Training and qualifications	
Chapter 19	Inspection and maintenance requirements	
2000 HSC Code		
Para 1.3.7	Verification	

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Para 1.4.37	Determination of "maximum operational weight"	
Para 1.5.1.2	Specifying intervals for renewal surveys	
Para 1.5.4	Inspection and survey	
Para 1.5.5	Recognized organizations and nominated surveyors	
Para 1.5.7	Completeness of survey and inspection	
Para 1.7.3	Investigation to determine the need of survey	
Para 1.8.1	Issue/endorsement of certificate	
Para 1.9.1.1.4	Transit voyage – satisfied with the arrangement	
Para 1.9.2	Issue of permit to operate	
Para 1.9.7	The worst intended conditions and the operational limitations	
Para 1.11.2	Equivalents – reporting	
Para 1.12.1	Adequate information and guidance provided to the craft by the company	
Paras 1.13.2 and 1.13.3	Novel designs	
Para 1.14.1	Investigation reports to IMO	
Para 2.9.3	Verification of load line marks	
Paras 2.7.5 and 2.14.2	Inclining and stability information – approval	
Para 3.4	Determination of service life	
Para 3.5	Design criteria	
Para 4.2.2	Approval of public address system	
Para 4.8.3	Documentation and verification of evacuation time	

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Para 4.8.10	Evacuation demonstration	
Para 7.3.3	Approval of structural fire protection details	
Para 7.5.6.3	Safe outlets for exhaust fans in fuel tank spaces	
Para 7.7.1.1.8	Limitation of number of enclosed spaces in each section	
Para 7.7.1.3.2	Sensitivity limits of smoke detectors	
Para 7.7.3.3.6	Additional quantity of fire-extinguishing medium	
Para 7.17.1	Reduced requirements for cargo craft of less than 500 GT	
Para 7.17.3.1.5	Water spray system – approval	
Para 7.17.3.3	Smoke detection systems – equivalent protection	
Para 7.17.4	Issue of Document of Compliance for craft carrying dangerous goods	
Para 8.1	Approval and acceptance of LSA and arrangements	
Para 8.9.7.1.2	Approval of servicing stations	
Para 8.9.8	Rotational deployment of marine evacuation systems	
Para 8.9.11	Extension of liferaft service intervals – notification	
Para 8.11	Helicopter pick-up areas – approval	
Para 10.2.4.9	Flexible oil fuel pipes	
Para 10.3.7	Internal diameters of suction branches	
Para 12.6.2	Specified voltages to earth	
Para 13.1.2	Shipborne navigational system and equipment and voyage data recorder and their installation	

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Para 13.17	Type approval	
Para 14.3.3	Exemptions – reporting	
Para 14.4.2	GMDSS Identities – suitable arrangements	
Para 14.14.1	Type approval	
Para 14.15.5	Ensuring maintenance	
Para 14.16	Radio personnel	
Para 14.17	Radio records	
Para 15.3.1	Operating station – field of vision	
Para 15.7.2	Ensuring clear view through windows	
Para 17.8	Acceleration and deceleration	
Para 18.1.4	Determining maximum allowable distance from a base port or place of refuge	
Para 18.2	Craft documentation	
Paras 18.3.1 to 18.3.7	Training and qualifications	
Chapter 19	Inspection and maintenance requirements	
Res. A.744(18), as amended	Guidelines on the enhanced programme of inspections during surveys of bulk carriers and oil tankers	
Annex A – Bulk carriers		
Part A – Single-side skin bulk carriers		
Para 1.3.1	Repair of damage affecting the ship's structural, watertight or weathertight integrity	
Para 1.3.2	Corrosion or structural defects impairing the ship's fitness	
Para 3.3.4	Repairs of cargo hatch securing system	
Para 5.1.1	Survey programme	

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Para 5.1.4	Maximum acceptable structural corrosion diminution levels	
Para 5.2.1.1	Provisions for proper and safe access	
Para 6.2.2	Survey report file	
Para 8.1.2	Evaluation of survey report	
Para 8.2.3	Condition evaluation report	
Annex 4B, para 1	Survey planning questionnaire	
Annex 5, para 3.1	Certification of thickness measurement	
Annex 9, para 2.3	Technical assessment in conjunction with the planning of enhanced surveys for bulk carriers	
Annex 13, para 3	Cargo hatch cover securing arrangements	
Part B – Double-side skin bulk carriers		
Para 1.3.1	Repair of damage affecting the ship's structural, watertight or weathertight integrity	
Para 1.3.2	Corrosion or structural defects impairing the ship's fitness	
Para 3.3.4	Cargo hatch cover securing system	
Para 5.1.1	Survey programme	
Para 5.1.5	Maximum acceptable structural corrosion diminution levels	
Para 5.2.2	Provisions for proper and safe access	
Para 6.2.2	Survey report file retained in the Administration	
Paras 8.1.2 and 8.2.3	Evaluation of survey report	
Annex 4B	Survey planning questionnaire	
Annex 5, para 3.1	Certification of a company engaged in thickness measurement	

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Annex 9, para 2.3	Technical assessment in conjunction with the planning of enhanced surveys for bulk carriers	
Annex 11, para 3	Materials and welding	
Annex B – Oil tankers		
Part A – Double hull oil tankers		
Para 1.3.1	Repair of damage affecting the ship's structural, watertight or weathertight integrity	
Para 1.3.2	Corrosion or structural defects impairing the ship's fitness	
Para 2.4.3.2	Approval of corrosion prevention system	
Para 5.1.1	Survey programme	
Para 5.1.4	Maximum acceptable structural corrosion diminution levels	
Para 5.2.1.1	Provisions for proper and safe access	
Para 6.2.2	Survey report file	
Para 8.1.3	Evaluation of survey report	
Para 8.2.3	Condition evaluation report	
Annex 6B	Survey planning questionnaire	
Annex 7, para 3.1	Certification of thickness measurement	
Annex 9	Diminution limits of structural members	
Annex 11, para 2.3	Technical assessment in conjunction with the planning of enhanced surveys for oil tankers	

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Annex 12 Part B – Oil tankers other than double hull oil tankers	Criteria for longitudinal strength of hull girder for oil tankers	
Para 1.3.1	Repair of damage affecting the ship's structural, watertight or weathertight integrity	
Para 1.3.2 Para 2.4.3.2 Para 5.1.1	Corrosion or structural defects impairing the ship's fitness Approval of corrosion prevention system Survey programme	
Para 5.1.4 Para 5.2.1.1 Para 6.2.2 Para 8.1.3 Para 8.2.3 Annex 6B Annex 7, para 3.1 Annex 9 Annex 11, para 2.3 Annex 12	Maximum acceptable structural corrosion diminution levels Provisions for proper and safe access Survey report file Evaluation of survey report Condition evaluation report Survey planning questionnaire Certification of thickness measurement Diminution limits of structural members Technical assessment in conjunction with the planning of enhanced surveys for oil tankers Criteria for longitudinal strength of hull girder for oil tankers	
Res. 4 of the 1997 SOLAS Conference Section 5	Dimension and selection of weld connections and materials	

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Res. MSC.168(79)	Standards and criteria for side structures of bulk carriers of single-side skin construction	
Para 2.1	Applicable national standards	
Para 4.4	Applicable national standards	
Para 4.5	Applicable national standards	
NO_x Technical Code 2008		
Chapter 1	Assumption of full responsibility for the approval of documentation as required by the Code together with the acceptance of procedures and alternatives as permitted by the Code	
Chapter 2	Issue of the Engine International Air Pollution Prevention Certificate, arrangements for the Parent Engine test and pre-certification of engines, usage of the Engine Family/Engine Group concepts and approval of the Technical File and any subsequent amendments	
Chapter 2 para 2.2.5.1	Approval and pre-certification in the case referred to in the paragraph	
Chapter 3	Acceptance of modification of engine speed at E2 test cycle 25% power mode point	
Chapter 4	Assignment of Engine Family/Engine Group status, as applicable, and selection of associated Parent Engine. Acceptance of conformity of production arrangements. Adjustment of Parent Engine relative to Engine Group reference values	
Chapter 5	Ensuring that the Parent Engine test and subsequent calculations are undertaken in accordance with Code requirements and that, where alternatives are applied, these meet the Code's equivalency requirements and any deviations are within the permitted margins. Filing of Parent Engine test report	

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Chapter 6	Onboard NO _x Verification Procedures are in accordance with the provisions of the Code and are adequate to provide verification that an engine, as so surveyed, will be in accordance with the applicable Annex VI requirements. Acceptance of aspects within Onboard NO _x Verification Procedure – Simplified Measurement Method if applicable. Approval of aspects within Onboard NO _x Verification Procedure – Direct Measurement and Monitoring Method including the Onboard Monitoring Manual, if applicable	
Chapter 7	Installation of Approved method – amendment of IAPP Certificate	
Appendix IV	Verification that the calibration of all necessary measurement equipment meets Code requirements	
Appendix VII	Aspects to be included within Onboard NO _x Verification Procedure – Parameter Check Method	
Appendix VIII	Approval of alternative exhaust gas measurement principles	
IBC CODE		
Para 1.1.6	Prescribe preliminary suitable conditions for carriage of products not listed in chapter 17 or 18	
Para 1.4.2	Equivalents – communication to IMO	
Section 1.5	Survey and certification	
Para 2.2.2	Intact stability in all seagoing conditions	
Para 2.2.3	Free surface effect in undamaged compartments	
Para 2.4	Conditions of loading	
Para 2.8.1.6	Standard of damage	
Para 2.8.2	Standard of damage – alternative measures	

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Para 2.9.2.3	Residual stability during intermediate stages of flooding	
Para 3.4.4	Access to spaces in the cargo area	
Para 3.7.3.5	Alternative arrangements for draining the piping	
Para 3.7.4	Relaxation for small ships	
Para 5.1.6.4	Dimensions for flanges not complying with the standards	
Para 5.2.2	Piping fabrication and joining details	
Para 7.1.1	Cargo temperature control – general	
Para 8.3.6	Devices to prevent the passage of flames into cargo tanks – requirements for the design, testing and locating	
Para 10.1.3	Electrical installations – appropriate steps for uniform implementation	
Para 10.1.4	Electric equipment, cables and wiring which do not conform to the standard	
Para 10.1.5	Electrical equipment in hazardous locations	
Para 11.2.2	Approval of an appropriate fire-extinguishing system	
Para 11.3.2	Cargo area – additional arrangements	
Para 11.3.5.3	Cargo area – minimum capacity of monitor	
Para 11.3.7	Minimum capacity of foam monitor for ships less than 4,000 tonnes deadweight	
Para 11.3.13	Alternative provisions to deck foam system	
Para 13.2.3	Exemption of toxic vapour detection equipment	
Para 14.1.2	Protective equipment	

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Chapter 15	Approval of special requirements for specific chemicals	
Para 16.2.2	Cargo information – independent expert	
Para 16.5.1	Stowage of cargo samples – approval	
Para 18.2	Safety requirements – list of products to which the Code does not apply	
BCH CODE		
Para 1.5.2	Equivalents – communication to IMO	
Section 1.6	Survey requirements	
Section 1.8	New products – establishing suitable conditions – notification to IMO	
Para 2.2.4	Determination of the ability to survive flooding of the machinery space in Type 3 below 125 m in length	
Para 2.2.5	Nature of alternative measures prescribed for small ships – duly noted on certificate	
Para 2.9.5	Access to void spaces, cargo tanks, etc. – approval of smaller dimensions in special circumstances	
Section 2.10	Cargo piping systems – setting standards	
Section 2.12	Cargo hoses – setting standards	
Para 2.14.2	High-velocity vent valves – type approval	
Para 2.15.1	Cargo heating and cooling systems	
Para 3.1.2(f)	Ventilation fans – approval	
Para 3.14.1	Alternative provisions for ships dedicated to the carriage of specific cargoes	
Para 3.14.2	Additional arrangements when foam is not effective or is incompatible	
Para 3.14.7	Foam monitors on ships of less than 4,000 tonnes deadweight – minimum capacity	

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Para 3.15.2	Protection of cargo pump-rooms with fire-extinguishing systems – approval	
Para 3.15.5	Products evolving flammable vapours – fire-extinguishing systems – approval	
Chapter IV	Approval of special requirements for specific chemicals	
IGC CODE		
Para 1.1.6	Establishment of preliminary suitable conditions of carriage and notification	
Para 1.4.2	Equivalents – reporting	
Section 1.5	Surveys and certification	
Para 2.2.2	Stability standard – acceptance	
Para 2.2.3	Method to calculate free surface effect – acceptance	
Para 2.3.3	Automatic non-return valves – acceptance	
Para 2.4	Damage survival capability investigation	
Para 2.8.2	Alternative measures – approval	
Para 2.9.1.3	Residual stability during intermediate stages of flooding	
Para 3.5.3.2	Decreased clear opening in the cargo area	
Section 3.8	Bow or stern loading and unloading arrangements – approval	
Para 4.2.7	Design temperature	
Paras 4.4.2.5 and 4.4.4.1	Structural analysis of the hull	
Paras 4.4.6.1.1, 4.4.6.2.1 and 4.4.6.3.2	Setting standards	
Para 4.4.7.2.1	Three-dimensional structural analysis	
Para 4.4.7.3	Analysis	

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Para 4.5.1.11	Allowable stresses – approval	
Para 4.7.3	Secondary barriers for non-basic tank types	
Para 4.7.7	Checking method – approval	
Para 4.8.4.4	Design and construction of the heating system	
Para 4.9.8	Insulation materials	
Para 4.10.1.2.2	Bevel preparation, etc. – acceptance and approval	
Para 4.10.2	Workmanship	
Para 4.10.5.2	Quality control specifications	
Para 4.10.6	Integral tank-testing	
Para 4.10.8.3	Tightness test	
Para 4.10.9	Type C independent tanks – inspection and NDT	
Para 4.10.10.3.7	Consideration of pneumatic testing	
Para 4.11.1	Soaking temperature and holding times	
Para 4.11.2	Alternative to heat treatment – approval	
Paras 5.2.4.4 and 5.2.4.5	Flanges, valves and other fittings	
Para 5.4.2.2	Dimensions	
Para 5.4.2.3	Screwed couplings – acceptance	
Para 5.5.2	Cargo and process piping – alternative testing approval	
Para 6.1.5	Tensile strength, yield stress and elongation	
Para 6.3.7.4	Schedule for inspection and NDT	
Section 7.1	Cargo pressure/temperature control	
Paras 8.2.2, 8.2.5 and 8.2.7	Pressure relief devices	

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Para 9.5.2	A means of preventing the backflow of cargo	
Para 10.1.5	Electrical equipment installation	
Para 11.4.1	Dry chemical powder fire-extinguishing system	
Para 11.5.2	Approval of appropriate fire-extinguishing system for cargo compressor and pump-rooms	
Para 13.5.4	Number and position of temperature indicating devices	
Para 13.6.1	Gas detector equipment	
Para 13.6.13	Portable gas detection equipment	
Para 14.4.5	Provision of space to protect personnel	
Section 15.2	Maximum allowable loading limits – approval of list	
Para 16.5.2	Forced draught system for boilers	
Para 16.5.6	Purging of combustion chambers of boilers	
Para 17.14.2.1	Non-acceptance of cargo discharge compressors on board	
Para 17.20.3.1	Valves, flanges, fittings and accessory equipment material – acceptance	
Para 17.20.13.2	Cargo handling plans – approval	
Para 17.20.14	Maximum allowable tank filling limits – approval of list	
STCW Code, part A		
Section A-I/10.2	Withdrawal of endorsement of recognition – communication to the Party that issued the certificate	
Section A-II/4.4	Determining the requirements of training, assessment and certification where there are no tables of competence for the support level	

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Section A-III/4.4	Determining the requirements of training, assessment and certification where there are no tables of competence – for the support level	
Section A-VIII/1.1	Fitness of duty – consideration of the danger posed by fatigue of seafarers	
Section A-VIII/1.5	Requirements of watch schedules to be posted in a standardized form	
Section A-VIII/1.7	Requirements of maintaining records of daily hours of rest of seafarers	
Section A-VIII/1.10	Establishment of a limit of alcohol concentration for personnel performing designated duties	
Section A-VIII/2.84	Principles to be observed in keeping radio watch – directing the attention of companies, masters, radio watchkeeping personnel to comply with provisions in part 4-3 to ensure that an adequate safety radio watch is maintained when the ship is at sea	
Res. MEPC.94(46), as amended	Condition assessment scheme	
Para 4.1	Issue instructions to the recognized organization (RO) for Condition Assessment Scheme (CAS) survey	
Para 4.3	Require oil tankers to remain out of service until Statement of Compliance is issued	
Para 7.1.3	CAS surveyors' requirements	
Para 11	Verification of CAS	
Para 12	Reassessment of ships that have failed	
Para 13	Issue, suspension or withdrawal of Statement of Compliance	
Para 14	Communication to IMO	
Res. MSC.215(82)	Performance standard for protective coatings for dedicated seawater ballast tanks in all types of ships and double-side skin spaces	

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
	of bulk carriers	
Para 3.2	Inspection of surface preparation and coating processes	
Para 3.4.1	Coating technical file	
Para 4.4.3	The Technical Data Sheet and Statement of Compliance or Type Approval Certificate – verification	
Section 5	Coating system approval	
Para 6.1.1	Verification of equivalent qualification of coating inspector	
Section 7	Verification requirements	
Res. MSC.288(87)	Performance standard for protective coatings for cargo oil tanks of crude oil tankers	
Para 3.2	Inspection of surface preparation and coating processes – review	
Para 4.6.3	Verification of the Technical Data Sheet and Statement of Compliance or Type Approval Certificate for the protective coating system	
Para 6.1.1	Equivalent to NACE Coating Inspector Level 2 and FROSIO Inspector Level III – verification	
Para 7	Coating verification requirement as referred to in paragraph 7	
Res. MSC.289(87)	Performance standard for alternative means of corrosion protection for cargo oil tanks of crude oil tankers	
Para 2.2	Verification of Technical File	
Para 4.2	Issuance of Type Approval Certificate for corrosion resistant steel	
Para 5	Survey(s) during the construction process to verify that approved corrosion-resistant steel has been applied to the area required	

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Casualty Investigation Code Para 1/1.3 Para 6/6.2	Qualified person (s) for investigation Investigation into a very serious marine casualty	
IS Code, 2008 Part A, Ch. 1.2	International Code on Intact Stability, 2008 Criteria demonstrating sufficient ship stability in critical stability situation in waves	
Part A, Ch. 2.1.3 Part A, Ch. 2.3 Part A, Ch. 3	Stability criteria where anti-rolling devices are installed Severe wind and stability criterion Special criteria for certain types of ships	
IMSBC Code Section 1.3 Section 1.5 Para. 7.3.2.2 Para. 7.3.2.3 Appendix 1, Schedule for Aluminium Ferrosilicon Powder, UN 1395 and Aluminium Silicon Powder, Uncoated, UN 1398	International Maritime Solid Bulk Cargoes Code Conditions for the carriage of cargoes not listed in the Code Exemptions Approval of specially constructed cargo ships Approval of plan of special arrangements and details of the stability conditions on which the design has been based Inspection and approval of gastight bulkheads between cargo spaces and engine-room	
Appendix 1, Schedule for Ferrosilicon, UN 1408, and Ferrosilicon	Inspection and approval of gastight bulkheads between cargo spaces and engine-room and approval of safety of bilge pumping arrangement	

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ANNEX 3

SPECIFIC COASTAL STATE OBLIGATIONS

The following table contains a non-exhaustive list of obligations, including those obligations imposed when a right is exercised.

SPECIFIC COASTAL STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
SOLAS 74		
Reg. V/4	Navigation warnings	
Reg. V/7.1	Search and rescue services – necessary arrangements	
Reg. V/7.2	Search and rescue services – information to IMO	
Reg. V/8	Life-saving signals	
Reg. V/9	Hydrographic services	
Reg. VII/6.1 and 7-4.1	Reporting of incidents involving dangerous goods	
MARPOL		
Annex I		
Reg. 4.3	Exceptions – discharge of substances containing oil for the purpose of combating pollution incidents	
Annex II		
Reg. 3.1.3	Exceptions – approval of discharge of NLS for the purpose of combating pollution incidents	
Reg. 13.2.3	Control of discharges of residues of NLS – agreement and communication to IMO	

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ANNEX 4

SPECIFIC PORT STATE OBLIGATIONS

The following table contains a non-exhaustive list of obligations, including those obligations imposed when a right is exercised.

SPECIFIC PORT STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
TONNAGE 69		
Art. 12	Inspection	
LL 66 AND LL PROT 88		
Art. 21	Control	amended by LL PROT 88
STCW 78		
Art. X	Control	
Reg. I/4	Control procedures	
SOLAS 74		
Reg. I/6(c)	Ships not allowed to sail	
Reg. I/19	Control	
Reg. VII/7-2.2	Documents relating to carriage of dangerous goods in solid form	
Reg. VIII/11	Special control for nuclear ships	
Reg. XI-1/4	Port State control on operational requirements	
MARPOL		
Art. 5(2)	Certificates and special rules on inspection of ships – port State control	
Art. 5(3)	Certificates and special rules on inspection of ships – denial of entry	
Art. 6(2)	Detection of violations and enforcement of the Convention – inspection	

SPECIFIC PORT STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Art. 6(5)	Detection of violations and enforcement of the Convention – inspection upon request – reporting	
Annex I		
Reg. 2.6.2	Application – an oil tanker delivered on or before 1 June 1982 engaged in specific trades: agreement with flag States	
Reg. 2.6.3	Application – an oil tanker delivered on or before 1 June 1982, engaged in specific trades: approval by port States	
Reg. 11	Port State control on operational requirements	
Reg. 17.7	Oil Record Book, Part I – inspection without undue delay	
Reg. 18.10.1.2	Segregated ballast tanks – oil tanker delivered on or before 1 June 1982 having special ballast arrangements: agreement with flag States	
Reg. 20.8.2	Denial of entry – communication to IMO	
Reg. 21.8.2	Denial of entry – communication to IMO	
Reg. 36.8	Oil Record Book, Part II – inspection without undue delay	
Reg. 38.1, 38.2 and 38.3	Reception facilities outside special areas	
Reg. 38.4 and 38.5	Reception facilities within special areas	
Reg. 38.6	Reception facilities within special areas – notification to IMO	
Reg. 38.7.1	Reception facilities within special areas: "Antarctic area"	
Annex II		
Reg. 4.3.3	Exemptions – approval of adequacy of reception facilities	
Reg. 13.6.1	Control of discharges of residues – endorsement of cargo record book	
Reg. 15.6	Cargo record book – inspection without undue delay	
Reg. 16.1	Measures of control	

SPECIFIC PORT STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Reg. 16.6 and 16.7	Measures of control – exemption granted (endorsement of cargo record book)	
Reg. 16.9	Port State control on operational requirement	
Reg. 18.1 and 18.2	Reception facilities and cargo unloading terminal arrangements	
Reg. 18.4	Cargo unloading terminal arrangements	
Annex III		
Reg. 8	Port State control on operational requirements	
Annex IV		
Reg. 12.1	Provision of reception facilities	
Reg. 12bis.1	Provision of reception facilities for passenger ships in special areas	
Reg. 12bis.2	Measures taken regarding reception facilities for passenger ships in Special Areas – notification to the Organization	
Reg. 13	Port State control on operational requirements	
Annex V		
Reg. 6.3.1	Provision of reception facilities – all garbage from all ships departing on route or arriving from the Antarctic area	
Reg. 8.1	Reception facilities	
Reg. 8.3.1	Reception facilities within special areas	
Reg. 8.3.2	Measures taken regarding provision of reception facilities – notification to the Organization	
Reg. 9	Port State control on operational requirements	
Reg. 10.5	Inspection of Garbage Record Book or ship's official logbook	
Annex VI		
Reg. 5.3.3	Necessary assistance to the surveyor as referred to in the paragraph	

SPECIFIC PORT STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
Reg. 10	Port State control on operational requirements – for chapter 4, limitation to verification of the availability of a valid International Energy Efficiency Certificate on board	
Reg. 15.2 and 15.3	Volatile organic compounds – approvals of vapour emission control systems and notification to IMO	
Reg. 17.2	Reception facilities as referred to in the paragraph – communication to IMO	
Reg. 18.10	Fuel oil quality – Communication to Party or non-Parties and remedial action	
IBC Code		
Para 15.8.25.3	Certification verifying that the required piping separation	
1994 HSC Code		
Para 1.3.5	Acceptance of the Code	
Para 1.5.6	Provide assistance for surveyors	
Para 1.6	Design approval	
Para 1.9.3	Operational conditions – Permit to Operate	
Para 1.9.4	Port State control	
Para 18.3.8	Training and qualifications	
2000 HSC Code		
Para 1.3.7	Acceptance of the Code	
Para 1.5.6	Provide assistance for surveyors	
Para 1.6	Design approval	
Para 1.9.3	Operational conditions – Permit to Operate	
Para 1.9.4	Port State control	
Para 18.3.8	Training and qualifications	

SPECIFIC PORT STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
GRAIN Code		
Para 3.4	Document of authorization	
Para 3.5	Document of authorization	
Para 5	Exemptions for certain voyages	
Para 7.2	Stability requirements	
IMSBC Code	International Maritime Solid Bulk Cargoes Code	
Section 1.3	Conditions for the carriage of cargoes not listed in the Code	
Section 1.5	Exemptions	

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ANNEX 5

INSTRUMENTS MADE MANDATORY UNDER IMO CONVENTIONS

SOLAS 74	Res. MSC.215(82)	reg. II-1/3-2.2
	Res. MSC.133(76), as amended	reg. II-1/3-6.2.1
	Res. MSC.287(87)	reg. II-1/3-10.3
	Res. MSC.288(87)	reg. II-1/3-11.1
	Res. MSC.289(87)	reg. II-1/3-11.2
	2008 IS Code	reg. II-1/5.1
	FSS Code	reg. II-2/3.22
	2010 FTP Code	reg. II-2/3.23
	LSA Code	reg. III/3.10
	IMSBC Code	reg. VI/1-2
	CSS Code, sub-chapter 1.9	reg. VI/2.1
	Grain Code	reg. VI/8.1
	IMDG Code	reg. VII/1.1
	IBC Code	reg. VII/8.1
	IGC Code	reg. VII/11.1
	INF Code	reg. VII/14.1
	ISM Code	reg. IX/1.1
	1994 HSC Code	reg. X/1.1
	2000 HSC Code	reg. X/1.2
	Res. A.739(18), as amended	reg. XI-1/1
	Res. A.789(19)	reg. XI-1/1
	Res. A.744(18), as amended	reg. XI-1/2
	Casualty Investigation Code	reg. XI-1/6
	Res. 4 of the 1997 SOLAS Conf.	reg. XII/1.7
	Res. MSC.169(79)	reg. XII/7.2
	Res. MSC.168(79)	reg. XII/14
MARPOL	Res. MEPC.94(46), as amended	Annex I, reg. 20.6
	IBC Code	Annex II, reg. 1.4
	BCH Code	Annex II, reg. 1.4
	NO _x Technical Code 2008	Annex VI, reg. 5.3.2
STCW 78	STCW Code, part A	reg. I/1.2.3
LL PROT 1988	2008 IS Code	Annex 1, reg. 1

* * *

ANNEX 6

SUMMARY OF AMENDMENTS TO MANDATORY INSTRUMENTS REFLECTED IN THE NON-EXHAUSTIVE LIST OF OBLIGATIONS (ANNEXES 1 TO 4)

The amendments to mandatory instruments reflected in annexes 1 to 4 are summarized below to facilitate the amendment of corresponding tables in the future.

SOLAS 1974	up to and including 2011 amendments (res. MSC.317(89)), except chapter XI-2, regulation V/19-1 and ISPS Code) as adopted
Res. MSC.215(82)	
Res. MSC.133(76), as amended	up to and including the 2004 amendments (res. MSC.158(78))
Res. MSC.287(87)	as adopted
Res. MSC.288(87)	as adopted
Res. MSC.289(87)	as adopted
2008 IS Code	Up to res. MSC.319(89)(part B only)
FSS Code	up to and including the 2011 amendments (res. MSC.311(88))
2010 FTP Code	up to and including the 2010 amendments (res. MSC.307(88))
LSA Code	Up to res. MSC.320(89)
IMSBC Code	up to and including the 2011 amendments (res. MSC. 318(89))
CSS Code, sub-chapter 1.9	up to and including the 2002 amendments (MSC/Circ.1026)
GRAIN Code	up to and including the 1991 amendments (res. MSC.23(59))
IMDG Code	up to and including the 2010 amendments (res. MSC. 294(87))
IBC Code	up to and including the 2006 amendments (res. MSC.219(82) and res. MEPC.166(56))
IGC Code	up to and including the 2006 amendments (res. MSC.220(82))
INF Code	up to and including the 2007 amendments (res. MSC.241(83))
ISM Code	up to and including the 2008 amendments (res. MSC.273(85))
1994 HSC Code	up to and including the 2008 amendments (res. MSC.259(84))
2000 HSC Code	up to and including the 2008 amendments (res. MSC.271(85))
Res. A.739(18)	up to and including 2006 amendments (res. MSC.208(81))
Res. A.789(19)	no amendments yet adopted
Res. A.744(18), amended	up to and including the 2008 amendments (res. MSC.261(84))
Casualty Investigation Code	res. MSC.255(84)

Res. 4 of the 1997 SOLAS Conf.	no amendments yet adopted
Res. MSC.169(79)	no amendments yet adopted
Res. MSC.168(79)	no amendments yet adopted
SOLAS PROT 1978	up to and including the 1988 amendments (resolution of the 1988 GMDSS-P Conference)
SOLAS PROT 1988	up to and including the 2010 amendments (res. MSC.309 (88))
MARPOL	up to and including the 2012 (res. MEPC.217(63)) amendments
Res. MEPC.94(46), as amended	up to and including the 2006 amendments (res. MEPC.155(55))
IBC Code	up to and including the 2006 amendments (res. MEPC.166(56) and res. MSC.219(82))
BCH Code	up to and including the 2006 amendments (res. MEPC.144(54) and res. MSC.212(81))
NO _x Technical Code 2008	up to and including the 2012 amendments (res. MEPC. 217(63))
STCW 1978	up to and including the Manila amendments (STCW/Conf.2/res.1), except regulations VI/5.2, 6.3 and 6.6
STCW Code, part A	up to and including the Manila amendments (STCW/Conf.2/res.2)
LL 1966	up to and including the 2005 amendments (res. A.972(24))
LL PROT 1988	up to and including the 2008 amendments (res. MSC.270(85))
TONNAGE 1969	no amendments yet adopted
COLREG 1972	up to and including the 2001 amendments (res. A.910(22))

* * *

ANNEX 7

**AMENDMENTS³ TO IMO INSTRUMENTS EXPECTED TO BE ACCEPTED
AND TO ENTER INTO FORCE BETWEEN 1 JANUARY 2014 AND 1 JULY 2014**

The following tables contain non-exhaustive lists of obligations, including those obligations imposed when a right is exercised.

OBLIGATIONS OF CONTRACTING GOVERNMENTS/PARTIES		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
MARPOL <u>Annex III, reg. 1.3</u>	<u>Application – issue detailed requirements on packing, marking, labelling, documentation, stowage, quantity limitations and exceptions for preventing or minimizing pollution of the marine environment by harmful substances</u>	<u>In force 1.1.2014 by MEPC.193(61)</u>
IMDG Code <u>Ch 3.3 SP356</u>	<u>Approval of metal hydride storage systems installed in vehicles, vessels or aircrafts or in completed components or intended to be installed in vehicles, vessels or aircrafts</u>	<u>In force 1/1/2014 by MSC.328(90)</u>
<u>Section 5.4.1</u>	<u>Information required in addition to the dangerous goods description – role of the competent authority</u>	<u>In force 1/1/2014 by MSC.328(90)</u>
<u>Section 6.2.3</u>	<u>The marking of salvage pressure receptacles – determination by the competent authority</u>	<u>In force 1/1/2014 by MSC.328(90)</u>
<u>Section 7.1.14</u> <u>7.1.4.5</u>	<u>Stowage of goods of class 7 – role of competent authority</u>	<u>In force 1/1/2014 by MSC.328(90)</u>

³ The struck-out text indicates deletions and the underlined text shows additions or changes, to the non-exhaustive list of obligations.

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
SOLAS		
<u>Reg. V/14.2</u>	<u>Establishing appropriate minimum safe manning following a transparent procedure and issuing an appropriate minimum safe manning document or equivalent</u>	<u>In force 1/1/2014 by MSC.325(90)</u>
<u>2011 ESP Code⁴</u>		
<u>Annex A, part A</u>		
<u>3.3.4</u>	<u>Supervision on repair of cargo hatch securing system</u>	<u>In force 1/1/2014 by A.1049(27)</u>
<u>5.1.1</u>	<u>Cooperation on development of a specific survey programme</u>	<u>In force 1/1/2014 by A.1049(27)</u>
<u>5.1.4</u>	<u>Advice on the maximum acceptable structural diminution levels</u>	<u>In force 1/1/2014 by A.1049(27)</u>
<u>5.2.2</u>	<u>Agreement on provisions for proper and safe access</u>	<u>In force 1/1/2014 by A.1049(27)</u>
<u>8.1.2</u>	<u>Evaluation of survey report</u>	<u>In force 1/1/2014 by A.1049(27)</u>
<u>8.2.3</u>	<u>Endorsement on condition evaluation report</u>	<u>In force 1/1/2014 by A.1049(27)</u>
<u>Annex 4B, para 1</u>	<u>Cooperation on development of a survey programme</u>	<u>In force 1/1/2014 by A.1049(27)</u>
<u>Annex 5, para 3.1</u>	<u>Certification of a company engaged in thickness measurement</u>	<u>In force 1/1/2014 by A.1049(27)</u>
<u>Annex A, part B</u>		<u>In force 1/1/2014 by A.1049(27)</u>
<u>3.3.4</u>	<u>Supervision on repair of cargo hatch securing system</u>	<u>In force 1/1/2014 by A.1049(27)</u>
<u>5.1.1</u>	<u>Cooperation on development of a specific survey programme</u>	<u>In force 1/1/2014 by A.1049(27)</u>
<u>5.1.4</u>	<u>Advice on the maximum acceptable structural diminution levels</u>	<u>In force 1/1/2014 by A.1049(27)</u>
<u>5.2.2</u>	<u>Agreement on provisions for proper and safe access</u>	<u>In force 1/1/2014 by A.1049(27)</u>

⁴ All items under resolution A.744(18) are deleted.

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
<u>8.1.2</u>	<u>Evaluation of survey report</u>	<u>In force 1/1/2014 by A.1049(27)</u>
<u>8.2.3</u>	<u>Endorsement on condition evaluation report</u>	<u>In force 1/1/2014 by A.1049(27)</u>
<u>Annex 4B, para 1</u>	<u>Cooperation on development of a survey programme</u>	<u>In force 1/1/2014 by A.1049(27)</u>
<u>Annex 5, para 3.1</u>	<u>Certification of a company engaged in thickness measurement</u>	<u>In force 1/1/2014 by A.1049(27)</u>
<u>Annex B, part A</u>		
<u>5.1.1</u>	<u>Cooperation on development of a specific survey programme</u>	<u>In force 1/1/2014 by A.1049(27)</u>
<u>5.1.4</u>	<u>Advice on the maximum acceptable structural diminution levels</u>	<u>In force 1/1/2014 by A.1049(27)</u>
<u>5.2.1.1</u>	<u>Agreement on provisions for proper and safe access</u>	<u>In force 1/1/2014 by A.1049(27)</u>
<u>8.1.3</u>	<u>Evaluation of survey report</u>	<u>In force 1/1/2014 by A.1049(27)</u>
<u>8.2.3</u>	<u>Endorsement on condition evaluation report</u>	<u>In force 1/1/2014 by A.1049(27)</u>
<u>Annex 6B</u>	<u>Cooperation on development of a survey programme</u>	<u>In force 1/1/2014 by A.1049(27)</u>
<u>Annex 7, para 3.1</u>	<u>Certification of a company engaged in thickness measurement</u>	<u>In force 1/1/2014 by A.1049(27)</u>
<u>Annex B, part B</u>		
<u>5.1.1</u>	<u>Cooperation on development of a specific survey programme</u>	<u>In force 1/1/2014 by A.1049(27)</u>
<u>5.1.4</u>	<u>Advice on the maximum acceptable structural diminution levels</u>	<u>In force 1/1/2014 by A.1049(27)</u>
<u>5.2.1.1</u>	<u>Agreement on provisions for proper and safe access</u>	<u>In force 1/1/2014 by A.1049(27)</u>
<u>8.1.3</u>	<u>Evaluation of survey report</u>	<u>In force 1/1/2014 by A.1049(27)</u>
<u>8.2.3</u>	<u>Endorsement on condition evaluation report</u>	<u>In force 1/1/2014 by A.1049(27)</u>

SPECIFIC FLAG STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
<u>Annex 6B</u>	<u>Cooperation on development of a survey programme</u>	<u>In force 1/1/2014 by A.1049(27)</u>
<u>Annex 7, para 3.1</u>	<u>Certification of a company engaged in thickness measurement</u>	<u>In force 1/1/2014 by A.1049(27)</u>
FSS Code		
<u>Para 6/3.1.2</u>	<u>Foam concentrates of high-expansion foam fire-extinguishing systems – approval</u>	<u>In force 1/1/2014 by MSC.327(90)</u>
<u>Para 6/4.1</u>	<u>Foam concentrates of low-expansion foam fire-extinguishing systems - approval</u>	<u>In force 1/1/2014 by MSC.327(90)</u>
<u>Para 5/2.54</u>	<u>Equivalent systems - approval</u>	<u>In force 1/7/2014 by MSC.339(91)</u>
<u>Para 7/2.4</u>	<u>Fixed water-based fire-fighting system for ro-ro spaces, vehicle spaces and special category spaces – approval</u>	<u>In force 1/7/2014 by MSC.339(91)</u>
<u>Para 14/2.2.1.2</u>	<u>Medium expansion ratio foam — application rate, etc.</u>	<u>Chapter 14 replaced by MSC.339(91)</u>
<u>Para 14/2.2.1.4</u>	<u>Foam concentrate supplied on board for cargoes intended to be carried – approval</u>	<u>In force 1/7/2014 by MSC.339(91)</u>
Noise Code		
<u>Para 3.3.9</u>	<u>Operating conditions at sea trials for ships with dynamic positioning (DP)</u>	<u>Mandatory under SOLAS II-1/3-12 (in force 1/7/2014 by MSC.338(91))</u> <u>In force 1/7/2014 by MSC.337(91)</u>

SPECIFIC PORT STATE OBLIGATIONS		
SOURCE	SUMMARY DESCRIPTION	COMMENTS
MARPOL		
<u>Annex III, reg. 8</u>	<u>Port State control on operational requirements</u>	<u>In force 1/1/2014 by MEPC.193(61)</u>

ANNEX 36

AMENDMENTS TO THE UNIFIED INTERPRETATION TO REGULATION 12.2 OF MARPOL ANNEX I

1 The existing Unified Interpretation to regulation 12.2 should read as an interpretation to regulation 12.2.1.

2 A new Unified Interpretation to regulation 12.2.2 is added as follows:

Regulation 12.2.2 – Sludge tank discharge piping

- 1 Regulation 12.2.2 should not be retroactively applied to ships delivered before 1 January 2014*.
- 2 There should be no interconnections between the sludge tank discharge piping and bilge-water piping other than possible common piping leading to the standard discharge connection referred to in regulation 13.
- 3 For ships delivered before 1 January 2014*, existing arrangements where the oil residue (sludge) tank(s) have discharge connections to oily bilge water holding tank(s), tank top or oily water separator may be accepted.
- 4 Screw-down non-return valves arranged in lines connecting to common piping leading to the standard discharge connection required by regulation 13, to prevent sludge from discharging to the bilge system, oily bilge water holding tank(s), tank top or oily water separators, provide a means equivalent to an arrangement that has "no interconnection" or "no discharge connections" as so specified in regulation 12.2 and the Unified Interpretation referenced by paragraph 2.
- 5 It is understood that the common piping may serve only one purpose and that is to connect the discharge lines of the bilge and sludge pumps to the standard discharge connection referred to in regulation 13, or any other approved means of disposal.

* Ship delivered before 1 January 2014 means a ship:

- .1 for which the building contract is placed before 1 January 2011; or
- .2 in the absence of a building contract, the keel of which is laid or which is at a similar stage of construction before 1 January 2012; or
- .3 the delivery of which is before 1 January 2014.

ANNEX 37

DRAFT AMENDMENTS TO MARPOL ANNEX I

(Mandatory carriage requirements for stability instrument)

Chapter 1 – General

Regulation 1 – Definitions

1 A new paragraph 28.10 is inserted, as follows:

"28.10 Oil tanker delivered on or after [date of entry into force] means an oil tanker:

- .1 for which the building contract is placed on or after [date of entry into force]; or
- .2 in the absence of a building contract, the keel of which is laid or which is at a similar stage of construction on or after [date of entry into force]; or
- .3 the delivery of which is on or after [date of entry into force]; or
- .4 which has undergone a major conversion:
 - .1 for which the contract is placed on or after [date of entry into force]; or
 - .2 in the absence of a contract, the construction work of which is begun on or after [date of entry into force]; or
 - .3 which is completed on or after [date of entry into force]."

Regulation 2 – Application

2 A new paragraph 3(6) is inserted, as follows:

"The Administration may waive the requirements of regulation 28(6) for the following oil tankers if loaded in accordance with the approved conditions":

- .1 tankers which are on a dedicated service, with a limited number of permutations of loading such that all anticipated conditions have been approved in the stability information provided to the master in accordance with regulation 28(5);
- .2 tankers where stability verification is made remotely by a means approved by the Administration;
- .3 tankers which are loaded within an approved range of loading conditions; or

- .4 tankers constructed before [date of entry into force] provided with approved limiting KG/GM curves covering all applicable intact and damage stability requirements.

* Refer to operational guidance provided in part 2 of the [Guidelines for verification of damage stability requirements for tankers (MSC.1/Circ....)]."

Chapter 4 – Requirements for the cargo area of oil tankers

Regulation 28 – Subdivision and damage stability

- 3 The current paragraph 28(6) is renumbered as 28(7).

- 4 A new paragraph 28(6) is inserted, as follows:

"28(6) Oil tankers, as defined in regulation 1.28.10, to which this regulation applies, shall be fitted with a stability instrument capable of verifying compliance with intact and damage stability requirements, approved by the Administration having regard to the performance standards recommended by the Organization*:

- .1 oil tankers constructed before [date of entry into force] shall comply with this regulation at the first scheduled renewal survey of the ship after [date of entry into force] but not later than [five years after date of entry into force];
- .2 notwithstanding the requirements of regulation 28(6).1 a stability instrument installed on a ship constructed before [date of entry into force] need not be replaced provided it is capable of verifying compliance with intact and damage stability, to the satisfaction of the Administration; and
- .3 for the purposes of control under regulation 11, the Administration shall issue a document of approval for the stability instrument.

* Refer to part B, chapter 4, of the International Code on Intact Stability, 2008 (2008 IS Code), as amended; the Guidelines for the Approval of Stability Instruments (MSC.1/Circ.1229), annex, section 4, as amended; and the technical standards defined in part 1 of the [Guidelines for verification of damage stability requirements for tankers (MSC.1/Circ....)]."

Appendix II – Form of IOPP Certificate and Supplements, Form B

5 The following new paragraphs 5.7.5 and 5.7.6 are inserted:

"5.7.5 The ship is provided with an Approved Stability Instrument in accordance with regulation 28(6).....□"

"5.7.6 The requirements of regulation 28(6) are waived in respect of the ship in accordance with regulation 3.6. Stability is verified by the following means:

.1 loading only to approved conditions defined in the stability information provided to the master in accordance with regulation 28(5).....□

.2 verification is made remotely by a means approved by the administration:.....□

.3 loading within an approved range of loading conditions defined in the stability information provided to the master in accordance with regulation 28(5).....□

.4 loading in accordance with approved limiting KG/GM curves covering all applicable intact and damage stability requirements defined in the stability information provided to the master in accordance with regulation 28(5)□"

ANNEX 38

DRAFT AMENDMENTS TO THE CODE FOR THE CONSTRUCTION AND EQUIPMENT OF SHIPS CARRYING DANGEROUS CHEMICALS IN BULK (BCH CODE)

(Mandatory carriage requirements for stability instrument)

Chapter II – Cargo containment

Part A – Physical protection (Siting of cargo tanks: ship stability)

- 1 Existing subparagraph 2.2.1 is replaced by the following:

"2.2.1 General: Ships subject to this Code may be assigned the minimum freeboard permitted by the International Convention on Load Lines, 1966. The additional requirements in paragraph 2.2.4, taking into account any empty or partially filled tank as well as the specific gravities of cargoes to be carried, however, should govern the allowed operating draught for any actual condition of loading.

2.2.1.1 All ships engaged in the transport of chemicals in bulk should be supplied with loading and stability manuals for the information and guidance of the master. These manuals should contain details concerning the loaded conditions of full and empty or partially empty tanks, the position of these tanks in the ship, the specific gravities of the various parcels of cargoes carried, and any ballast arrangements in critical conditions of loading. Provisions for evaluating other conditions of loading should be contained in the manuals.

2.2.1.2 All ships, subject to the Code, shall be fitted with a stability instrument, capable of verifying compliance with intact and damage stability requirements, approved by the Administration, having regard to the performance standards recommended by the Organization*:

- .1 ships constructed before [date of entry into force] shall comply with this paragraph at the first scheduled renewal survey of the ship after [date of entry into force] but not later than [five years after date of entry into force];
- .2 notwithstanding the requirements of 2.2.1.2.1, a stability instrument installed on a ship constructed before [date of entry into force] need not be replaced provided it is capable of verifying compliance with intact and damage stability, to the satisfaction of the Administration; and
- .3 for the purposes of control under regulation 11, the Administration shall issue a document of approval for the stability instrument.

* Refer to part B, chapter 4, of the International Code on Intact Stability, 2008 (2008 IS Code), as amended; the Guidelines for the Approval of Stability Instruments (MSC.1/Circ.1229), annex, section 4, as amended; and the technical standards defined in part 1 of the [Guidelines for verification of damage stability requirements for tankers (MSC.1/Circ....)].

2.2.1.3 The Administration may give special dispensation to the following ships from the requirements of paragraph 2.2.1.2 provided the procedures employed for intact and damage stability verification maintain the same degree of safety as being loaded in accordance with the approved conditions^{*}. Any such dispensation shall be duly noted on the Certificate of Fitness referred to in paragraph 1.6.3:

- .1 ships which are on a dedicated service, with a limited number of permutations of loading such that all anticipated conditions have been approved in the stability information provided to the master in accordance with the requirements of paragraph 2.2.1.1;
- .2 ships where stability verification is made remotely by a means approved by the Administration;
- .3 ships which are loaded within an approved range of loading conditions; or
- .4 ships provided with approved limiting KG/GM curves covering all applicable intact and damage stability requirements.

^{*} Refer to operational guidance provided in part 2 of the [Guidelines for verification of damage stability requirements for tankers (MSC.1/Circ....)]."

Certificate of Fitness

2 Paragraph 6 is replaced with the following:

"6 That the ship must be loaded:

- .1^{*} only in accordance with loading conditions verified compliant with intact and damage stability requirements using the approved stability instrument fitted in accordance with paragraph 2.2.1.2 of the Code;
- .2^{*} where a dispensation permitted by paragraph 2.2.1.3 of the Code applies and the approved stability instrument required by paragraph 2.2.1.2 of the Code is not fitted, loading shall be made in accordance with the following approved methods:
 - .i in accordance with the loading conditions provided in the approved loading manual, stamped and dated and signed by a responsible officer of the Administration, or of an organization recognized by the Administration; or
 - .ii in accordance with loading conditions verified remotely using an approved means; or
 - .iii in accordance with a loading condition which lies within an approved range of conditions defined in the approved loading manual referred to in i above; or
 - .iv in accordance with a loading condition verified using approved critical KG/GM data defined in the approved loading manual referred to in i above;

.3* in accordance with the loading limitations appended to this Certificate.

Where it is required to load the ship other than in accordance with the above instruction, then the necessary calculations to justify the proposed loading conditions shall be communicated to the certifying Administration who may authorize in writing the adoption of the proposed loading condition.

* Delete as appropriate."

ANNEX 39

DRAFT AMENDMENTS TO THE INTERNATIONAL CODE FOR THE CONSTRUCTION AND EQUIPMENT OF SHIPS CARRYING DANGEROUS CHEMICALS IN BULK (IBC CODE)

(Mandatory carriage requirements for stability instrument)

Chapter 2 – Ship survival capability and location of cargo tanks

2.2 – Freeboard and intact stability

- 1 The title of section 2.2 is amended to read:

"Freeboard and stability"

- 2 A new subparagraph 2.2.6 is added as follows:

"2.2.6 All ships, subject to the Code, shall be fitted with a stability instrument, capable of verifying compliance with intact and damage stability requirements, approved by the Administration having regard to the performance standards recommended by the Organization*:

- .1 ships constructed before [date of entry into force] shall comply with this requirement at the first scheduled renewal survey of the ship after [date of entry into force] but not later than [five years after date of entry into force];
- .2 notwithstanding the requirements of 2.2.6.1, a stability instrument installed on a tanker constructed before [date of entry into force] need not be replaced provided it is capable of verifying compliance with intact and damage stability, to the satisfaction of the Administration; and
- .3 for the purposes of control under regulation 11, the Administration shall issue a document of approval for the stability instrument.

* Refer to part B, chapter 4, of the International Code on Intact Stability, 2008 (2008 IS Code), as amended; the Guidelines for the Approval of Stability Instruments (MSC.1/Circ.1229), annex, section 4, as amended; and the technical standards defined in part 1 of the [Guidelines for verification of damage stability requirements for tankers (MSC.1/Circ....)]."

- 3 A new subparagraph 2.2.7 is added as follows:

"2.2.7 The Administration may give special dispensation to the following ships from the requirements of paragraph 2.2.6 provided the procedures employed for intact and damage stability verification maintain the same degree of safety, as being loaded in accordance with the approved conditions*. Any such dispensation shall be duly noted on the International Certificate of Fitness referred to in paragraph 1.5.4:

- .1 ships which are on a dedicated service, with a limited number of permutations of loading such that all anticipated conditions have been approved in the stability information provided to the master in accordance with the requirements of paragraph 2.2.5;
- .2 ships where stability verification is made remotely by a means approved by the Administration;
- .3 ships which are loaded within an approved range of loading conditions; or
- .4 ships constructed before [date of entry into force] provided with approved limiting KG/GM curves covering all applicable intact and damage stability requirements.

* Refer to operational guidance provided in part 2 of the [Guidelines for verification of damage stability requirements for tankers (MSC.1/Circ....)]."

Certificate of Fitness

4 Paragraph 6 is replaced with the following:

"6 That the ship must be loaded:

- .1* only in accordance with loading conditions verified compliant with intact and damage stability requirements using the approved stability instrument fitted in accordance with paragraph 2.2.6 of the Code;
- .2* where a dispensation permitted by paragraph 2.2.7 of the Code applies and the approved stability instrument required by paragraph 2.2.6 of the Code is not fitted, loading shall be made in accordance with the following approved methods:
 - .i in accordance with the loading conditions provided in the approved loading manual, stamped and dated and signed by a responsible officer of the Administration, or of an organization recognized by the Administration; or
 - .ii in accordance with loading conditions verified remotely using an approved means; or
 - .iii in accordance with a loading condition which lies within an approved range of conditions defined in the approved loading manual referred to in i above; or
 - .iv in accordance with a loading condition verified using approved critical KG/GM data defined in the approved loading manual referred to in i above;
- .3* in accordance with the loading limitations appended to this Certificate.

Where it is required to load the ship other than in accordance with the above instruction, then the necessary calculations to justify the proposed loading conditions shall be communicated to the certifying Administration who may authorize in writing the adoption of the proposed loading condition.

* Delete as appropriate."

ANNEX 40

DRAFT ASSEMBLY RESOLUTION

USE OF NATIONAL TONNAGE IN APPLYING INTERNATIONAL CONVENTIONS

THE ASSEMBLY,

RECALLING Article 15(j) of the Convention on the International Maritime Organization concerning the functions of the Assembly in relation to regulations and guidelines concerning maritime safety and the prevention and control of marine pollution from ships,

RECALLING ALSO that the International Convention on Tonnage Measurement of Ships, 1969 (1969 Tonnage Convention) introduced a new measurement system and that the tonnages measured under this system could be different from those measured under national tonnage rules,

RECALLING FURTHER that recommendation 2 of the International Conference on Tonnage Measurement of Ships, 1969, recommended the acceptance of the tonnages measured under this new system as the parameters referred to where those terms are used in conventions, laws, and regulations, while recognizing that transition to this new system should cause the least possible impact on the economics of merchant shipping and port operations,

NOTING that article 3(2)(d) of the 1969 Tonnage Convention provides for certain ships to retain their national tonnages for the purpose of applying relevant requirements under other existing international conventions, if they do not undergo alterations or modifications which the Administration deems to be a substantial variation in their existing gross tonnage,

NOTING ALSO that the Interim Schemes for Tonnage Measurement of resolutions A.494(XII), A.540(13) and A.541(13) effectively extended this use of national tonnages to certain other ships, for the purpose of applying relevant requirements, respectively, of the International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended, the International Convention on Training, Certification and Watchkeeping for Seafarers (STCW), 1978, and the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL),

NOTING FURTHER that resolutions A.758(18) (Application of recommendation 2 of the International Conference on Tonnage Measurement of Ships, 1969) and A.791(19) (Application of the International Convention on Tonnage Measurement of Ships, 1969, to existing ships) were adopted to address identification of national tonnages on International Tonnage Certificates (1969) and other pertinent certificates, including Ship Safety Certificates and International Oil Pollution Prevention Certificates,

BEING AWARE that amendments to the SOLAS, STCW and MARPOL Conventions made subsequent to the adoption of resolutions A.494(XII), A.540(13) and A.541(13) have led to misunderstandings over the use of national tonnage when applying newly established tonnage-based requirements for ships measured in accordance with the provisions of the 1969 Tonnage Convention and the Interim Schemes for Tonnage Measurement, highlighting the need for updated recommendations on this matter,

BEARING IN MIND the decisions of the Maritime Safety Committee to apply newly established tonnage-based requirements of the International Ship and Port Facility and Security (ISPS) and International Safety Management (ISM) Codes using a ship's tonnage as measured under the rules of the 1969 Tonnage Convention,

RECOGNIZING the necessity of uniform implementation of the 1969 Tonnage Convention with regard to national tonnages,

HAVING CONSIDERED the recommendations made by the Maritime Safety Committee, [at its ninety-second session (12 to 21 June 2013)], and the Marine Environment Protection Committee, [at its sixty-fifth session (13 to 17 May 2013)],

1. ADOPTS the recommendation on the use of national tonnage in applying international conventions, as set out in the annex to the present resolution;
2. AGREES that Governments which are Contracting Governments to the 1969 Tonnage Convention should use this Recommendation when applying the provisions of the 1969 Tonnage Convention and Interim Schemes for Tonnage Measurement;
3. REVOKES resolutions A.758(18) and A.791(19).

* * *

ANNEX

**RECOMMENDATION ON THE USE OF NATIONAL TONNAGE
IN APPLYING INTERNATIONAL CONVENTIONS**

1 In order to ensure consistency when using national tonnage to apply relevant requirements under international conventions, in accordance with article 3(2)(d) of the International Convention on Tonnage Measurement of Ships, 1969 (1969 Tonnage Convention) (TM 69) and Interim Schemes for Tonnage Measurement, as set forth in the *Revised interim scheme for tonnage measurement for certain ships* (resolution A.494(XII) for SOLAS, and the *Interim scheme for tonnage measurement for certain ships for the purposes of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto* (resolution A.541(13)), Administrations are recommended to accept the following:

National tonnage versus convention tonnage

2 National tonnage refers to the tonnage measurement of a ship under the Administration's national tonnage rules that pre-dated the adoption of the measurement rules of the 1969 Tonnage Convention. National gross tonnage is often expressed in terms of gross register tons (GRT). In contrast, the unitless gross tonnage measurement under the rules of the 1969 Tonnage Convention is expressed in terms of gross tonnage (GT).

Eligibility to use national tonnage

3 The 1969 Tonnage Convention and the Interim schemes for tonnage measurement provide for the use of national tonnage in applying relevant requirements under international conventions to certain ships with keel laid dates on or before 18 July 1994¹. Further, a ship which undergoes an alteration or modification which the Administration deems to be a substantial variation in its "existing" tonnage as described in article 3(2)(b) of the 1969 Tonnage Convention is treated as if the date on which the alterations or modifications commenced was the keel laid date for this purpose. The following table lists the basis for use of national tonnages as a function of a ship's keel laid/substantial alteration date and its national gross tonnage.

Basis for Using National Tonnage to Apply International Conventions*			
Ship's Keel Laid Date / Substantial Alteration Date	Ship's National Gross Tonnage		
	GRT < 400	400 ≤ GRT < 1600	GRT ≥ 1600
Before 18 July 1982	TM69 Art.3(2)(d)	TM69 Art.3(2)(d)	TM69 Art.3(2)(d)
18 July 1982 - 31 December 1985	A.494(XII) / A.541(13)	A.494(XII)	A.494(XII)
1 January 1986 - 18 July 1994	A.494(XII) / A.541(13)	A.494(XII)	Not Eligible
After 18 July 1994	Not Eligible	Not Eligible	Not Eligible

* Unless otherwise provided for in an International Convention or other instrument.

¹ The Interim schemes for tonnage measurement do not apply to ships covered by article 3(2)(d) of the 1969 Tonnage Convention, and may be applied to an eligible ship for the life of the ship under interpretations established at MSC 50 (MSC 50/27). A third Interim scheme for tonnage measurement, resolution A.540(13) for the STCW Convention, is no longer applicable as a result of the 1995 amendments to the Convention.

Relevant requirements under international conventions

4 The term "relevant requirements under" in article 3(2)(d) of the 1969 Tonnage Convention and throughout this recommendation refers to tonnage-based requirements for which a tonnage threshold was in effect on or before 18 July 1994, the date when the 1969 Tonnage Convention came fully into force. As such, national tonnage may not be used when applying newer tonnage thresholds in international conventions, unless otherwise provided in an international convention or other instrument. For example, for eligible ships, national tonnages may be used to apply the 500 gross tonnage cargo ship exemption threshold of regulation I/3 of SOLAS, which predates 18 July 1994. However, national tonnages may not similarly be used to apply the 500 gross tonnage threshold of SOLAS regulation XI-2/2.1.1.2, which came into effect after this date².

Remarks on International Tonnage Certificates (1969)

5 Notwithstanding the provisions of resolutions A.494(XII) and A.541(13), which state that gross tonnage measured under the national tonnage rules shall not be shown on the International Tonnage Certificate (1969), an entry may be made under "Remarks" on the International Tonnage Certificate (1969), to reflect the shipowner's decision to use national tonnages, as follows:

- .1 For ships covered by article 3(2)(d) of the 1969 Tonnage Convention,

"The ship is remeasured according to article 3(2)(d) of the 1969 Tonnage Convention. The GROSS TONNAGE according to the measurement system previously in force to the measurement system of the International Convention on Tonnage Measurement of Ships, 1969, is: . . . (*insert GRT tonnage*) . . . RT, according to the regulations of . . . (*insert country name*) . . ."
- .2 For ships covered by resolution A.494(XII) and/or resolution A.541(13),

"The ship is additionally measured according to resolution(s) . . . (*insert A.494(XII) and/or A.541(13), as applicable*) . . . The GROSS TONNAGE according to the measurement system previously in force to the measurement system of the International Convention on Tonnage Measurement of Ships, 1969, is: . . . (*insert GRT tonnage*) . . . RT, according to the regulations of . . . (*insert country name*) . . ."

Remarks on other international certificates (1969)

6 For ships for which the International Tonnage Certificate (1969) includes a "Remarks" entry on national tonnage as described in paragraph 5 of this recommendation, the appropriate box in the appropriate Ship Safety Certificate, the International Oil Pollution Prevention Certificate or other such official certificates issued by the Administration may show only that national gross tonnage with one of the following footnotes:

² Refer to the Interim scheme for the compliance of certain cargo ships with the special measures to enhance maritime security (MSC/Circ.1157) for additional details. The Interim Scheme for the compliance of certain cargo ships and special purpose ships with the management for the safe operation of ships (MSC.1/Circ.1231) similarly addresses use of national tonnages in applying the SOLAS ISM Code.

"The above gross tonnage has been determined by the tonnage authorities of the Administration in accordance with the national tonnage rules which were in force prior to the coming into force of the International Convention on Tonnage Measurement of Ships, 1969"; or

"See REMARKS column of the valid International Tonnage Certificate (1969)."

Removal of remarks

7 Should a ship lose eligibility for using national tonnage to apply relevant requirements under international conventions by undergoing alterations or modifications which the Administration deems to be a substantial variation in its existing tonnage as described in article 3(2)(b) of the 1969 Tonnage Convention, the Administration should ensure associated certificates described in paragraphs 5 and 6 of this recommendation are reissued or otherwise amended to delete reference to the ship's national tonnage.

ANNEX 41

STATEMENT BY THE OBSERVER FROM ITF ON HUMAN ELEMENT WORKING GROUP

At MEPC 63 the ITF expressed strong reservations regarding the movement of the Human Element Group to the STCW Sub-Committee and were concerned at STW 44 when the not only were the agenda items all removed but some flag states called for the Human Element working group to be removed from the agenda.

Our primary concerns expressed at MEPC 63 was the need for the MEPC to retain a direct control of the work of the Human Element Working Group as the majority of new workload, seafarers health and safety, responsibilities, liabilities and administrative burden emanate from the output of this committee.

It has been difficult due to the nature of work in progress to qualify or quantify the implications of a number of MARPOL annexes but I'm sure delegate will recognize the extensive changes that the committee have initiated.

We are now in a position where significant studies and conventions have come to fruition, notably the Project Horizon which is a more sophisticated study on fatigue along with the implementation of the revised STW and MLC 2006 plus the work by the IMO on the administrative burden. It may now be an appropriate time for MEPC to initiate consideration of the effect on seafarers and the industry as a whole of the implementation of these annexes in particular the Ballast water management, air pollution and low flash point fuel requirements.

For these reasons we would like to see a re commitment by this committee to the work of Human Element Working Group and a call for submissions on the holistic considerations of the effect of the recent MARPOL legislation on ships and their crews.

ANNEX 42

ITEMS IN THE BIENNIAL AND POST-BIENNIAL AGENDAS OF DE, DSC, FP, COMSAR, NAV, SLF AND STW SUB-COMMITTEES RELATING TO ENVIRONMENTAL ISSUES

Sub-Committee on Ship Design and Equipment (DE)					
PLANNED OUTPUTS 2014-2015 AND PROPOSED POST-BIENNIAL AGENDA					
Number	Description	Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Target completion year
1.1.2.2	Cooperation with IACS: consideration of unified interpretations	MSC / MEPC		BLG / DE / FP / FSI / NAV / SLF	Continuous
2.0.1.18	Unified interpretations of the MARPOL regulations	MEPC	BLG / COMSAR / DE / DSC / FP / FSI / NAV / SLF / STW		Continuous
5.2.1.17	Development of a mandatory Code of ships operating in polar waters	MSC / MEPC	DE	COMSAR / FP / NAV / SLF / STW	2014
7.1.2.16	Development of guidance on the safe operation and performance standards of oil pollution combating equipment	MEPC		DE	2014
7.2.2.2	Environmental aspects of alternative tanker designs	MSC / MEPC	BLG	DE	Continuous
7.1.2.15	Development of a Code for the transport and handling of limited amounts of hazardous and noxious liquid substances in bulk on offshore support vessels	MSC / MEPC	BLG	DE	2015
12.1.2.1	Collection and analysis of casualty and PSC data to identify trends and develop knowledge and risk-based recommendations	MSC / MEPC	FSI	BLG / DE / FP / NAV / STW	Continuous
Notes: Output to be renamed "Analysis of casualty reports and related trends". Proposal to change High-level action (12.1.2) text to "Undertake review of casualty reports submitted to IMO with a view to improving safety based on the lessons learned".					

Sub-Committee on Carriage of Dangerous Goods, Solid Cargoes and Containers (DSC)					
PLANNED OUTPUTS 2014-2015					
Number	Description	Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Target completion year
1.3.5.1	Harmonized provisions relating to the safe, secure and efficient carriage of dangerous goods following participation in the activities of UNCOE TDG, GHS and IAEA	MSC / MEPC	DSC	Secretariat	Continuous
2.0.1.18	Unified interpretations of the MARPOL regulations	MEPC	BLG / COMSAR / DE / DSC / FP / FSI / NAV / SLF / STW		Continuous
5.2.3.8	Amendments to MARPOL Annex III, as required	MEPC	DSC		Continuous
12.3.1.1	Guidance on the development of GISIS and on access to information	MSC / MEPC	DSC / FSI	BLG / FP / NAV / STW	Continuous
Notes: Output to be renamed "Collection and analysis of casualty and PSC data to identify trends and develop knowledge and risk-based recommendations".					
12.3.1.3	Consideration of reports of incidents involving dangerous goods or marine pollutants in packaged form on board ships or in port areas	MSC / MEPC	DSC	FSI	Continuous

Sub-Committee on Fire Protection (FP)					
PLANNED OUTPUTS 2014-2015 AND PROPOSED POST-BIENNIAL AGENDA					
Number	Description	Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Target completion year
1.1.2.2	Cooperation with IACS: consideration of unified interpretations	MSC / MEPC		BLG / DE / FP / FSI / NAV / SLF	Continuous
2.0.1.18	Unified interpretations of the MARPOL regulations	MEPC	BLG / COMSAR / DE / DSC / FP / FSI / NAV / SLF / STW		Continuous
5.2.1.17	Development of a mandatory Code of ships operating in polar waters	MSC / MEPC	DE	COMSAR / FP / NAV / SLF / STW	2014
12.1.2.1	Collection and analysis of casualty and PSC data to identify trends and develop knowledge and risk-based recommendations	MSC / MEPC	FSI	BLG / DE / FP / NAV / STW	Continuous
Notes: Output to be renamed "Analysis of casualty reports and trends". Proposal to change High-level action (12.1.2) text to "Undertake review of casualty reports submitted to IMO with a view to improving safety based on the lessons learned".					
12.3.1.1	Guidance on the development of GISIS and on access to information	MSC / MEPC	DSC/FSI	BLG / FP / NAV / STW	Continuous
Notes: Output to be renamed "Collection and analysis of casualty and PSC data to identify trends and develop knowledge and risk-based recommendations".					

Sub-Committee on Radiocommunications and Search and Rescue (COMSAR)					
PLANNED OUTPUTS 2014-2015 AND PROPOSED POST-BIENNIAL AGENDA					
Number	Description	Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Target completion year
2.0.1.18	Unified interpretations of the MARPOL regulations	MEPC	BLG / COMSAR / DE / DSC / FP / FSI / NAV / SLF / STW		Continuous
5.2.1.17	Development of a mandatory Code of ships operating in polar waters	MSC / MEPC	DE	COMSAR / FP / NAV / SLF / STW	2014

Sub-Committee on Safety of Navigation (NAV)					
PLANNED OUTPUTS 2014-2015					
Number	Description	Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Target completion year
1.1.2.2	Cooperation with IACS: consideration of unified interpretations	MSC / MEPC		BLG / DE / FP / FSI / NAV / SLF	Continuous
1.3.1.3	Identification of PSSAs, taking into account article 211 and other related articles of UNCLOS	MEPC	NAV		Continuous
2.0.1.18	Unified interpretations of the MARPOL regulations	MEPC	BLG / COMSAR / DE / DSC / FP / FSI / NAV / SLF / STW		Continuous
5.2.1.17	Development of a mandatory Code of ships operating in polar waters	MSC / MEPC	DE	COMSAR / FP / NAV / SLF / STW	2014
7.1.2.2	Mandatory instruments: designation of Special Areas and PSSAs and adoption of their associated protective measures	MEPC	NAV		Continuous
12.1.2.1	Collection and analysis of casualty and PSC data to identify trends and develop knowledge and risk-based recommendations	MSC / MEPC	FSI	BLG / DE / FP / NAV / STW	Continuous
Notes: Output to be renamed "Analysis of casualty reports and related trends". Proposal to change High-level action (12.1.2) text to "Undertake review of casualty reports submitted to IMO with a view to improving safety based on the lessons learned".					
12.3.1.1	Guidance on the development of GISIS and on access to information	MSC / MEPC	DSC / FSI	BLG / FP / NAV / STW	Continuous
Notes: Output to be renamed "Collection and analysis of casualty and PSC data to identify trends and develop knowledge and risk-based recommendations".					

Sub-Committee on Stability and Load Lines and Fishing Vessels Safety (SLF)					
PLANNED OUTPUTS 2014-2015 AND PROPOSED POST-BIENNIAL AGENDA					
Number	Description	Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Target completion year
1.1.2.1	Cooperation with FAO: preparation and holding of the third meeting of the Joint IMO/FAO Working Group on IUU fishing and related matters, including the adoption of a new treaty to facilitate the implementation of the technical provisions to the 1993 Torremolinos Protocol	MSC / MEPC	FSI / SLF		2013 2015
1.1.2.2	Cooperation with IACS: consideration of unified interpretations	MSC / MEPC		BLG / DE / FP / FSI / NAV / SLF	Continuous
2.0.1.18	Unified interpretations of the MARPOL regulations	MEPC	BLG / COMSAR / DE / DSC / FP / FSI / NAV / SLF / STW		Continuous
5.2.1.17	Development of a mandatory Code of ships operating in polar waters	MSC / MEPC	DE	COMSAR / FP / NAV / SLF / STW	2014

Sub-Committee on Standards of Training and Watchkeeping (STW)					
PLANNED OUTPUTS 2014-2015					
Number	Description	Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Target completion year
2.0.1.18	Unified interpretations of the MARPOL regulations	MEPC	BLG / COMSAR / DE / DSC / FP / FSI / NAV / SLF / STW		Continuous
5.2.1.17	Development of a mandatory Code of ships operating in polar waters	MSC / MEPC	DE	COMSAR / FP / NAV / SLF / STW	2014
12.3.1.1	Guidance on the development of GISIS and on access to information	MSC / MEPC	DSC / FSI	BLG / FP / NAV / STW	Continuous
Notes: Output to be renamed "Collection and analysis of casualty and PSC data to identify trends and develop knowledge and risk-based recommendations".					

ANNEX 43

BIENNIAL AND PROPOSED POST-BIENNIAL AGENDAS FOR THE BLG SUB-COMMITTEE AND PROVISIONAL AGENDA FOR BLG 18*

Number	Description	Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Target completion year
1.1.2.2	Consideration of IACS unified interpretations	MSC/MEPC		BLG/DE/FP/FSI/NAV/SLF	Continuous
2.0.1.8	Additional guidelines for implementation of the BWM Convention, including port State control	MEPC	BLG/FSI		2013 2015
2.0.1.9	Guidelines for replacement engines not required to meet the Tier III limit (MARPOL Annex VI)**	MEPC	BLG		2013 2015
2.0.1.11	Other relevant guidelines pertaining to equivalents set forth in regulation 4 of MARPOL Annex VI and not covered by other guidelines**	MEPC	BLG		2013 2015
2.0.1.12	Guidelines called for under paragraph 2.2.5.6 of the NO_x Technical Code**	MEPC	BLG		2013 2015
5.2.1.3	Development of international code of safety for ships using gases or other low-flashpoint fuels	MSC	BLG	DE/FP/SLF/STW	2013 2014
5.2.1.4	Development and approval of a revised IGC Code	MSC	BLG	DE/FP/SLF/STW	2013
7.1.2.5	Production of a manual entitled "Ballast Water Management – How to do it"	MEPC	BLG		Continuous 2015

* Proposed modifications to the Sub-Committee's 2012-2013 biennial agenda, as set out in annex 36 to document MSC 91/22. Outputs printed in bold have been selected for the draft provisional agenda for BLG 18, as shown in annex 2. Struck-out text indicates proposed deletions and shaded text indicates proposed changes. Deleted outputs will be maintained in the report on the status of planned outputs. Output numbers subject to change by A 28.

** To be considered under output 7.3.1.1.

Number	Description	Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Target completion year
7.1.2.15	Development of a Code for the transport and handling of limited amounts of hazardous and noxious liquid substances in bulk on offshore support vessels	MSC/MEPC	BLG	DE	2013 2015
7.1.2.20	Development of international measures for minimizing the transfer of invasive aquatic species through biofouling of ships	MSC/MEPC	BLG	DE	2013
7.2.2.3	Evaluation of safety and pollution hazards of chemicals and preparation of consequential amendments	MEPC	BLG		Continuous
7.3.1.1	Review of relevant non-mandatory instruments as a consequence of the amended MARPOL Annex VI and the NO_x Technical Code	MEPC	BLG		2013 2015
7.3.2.2	Consideration of the impact on the Arctic of emissions of Black Carbon from international shipping	MEPC	BLG		2013 2014
12.1.2.1	Casualty analysis	MSC	FSI	BLG/DE/FP/ NAV/STW/SLF	Continuous
13.0.3.1	Improved and new technologies approved for ballast water management systems and reduction of atmospheric pollution	MEPC	BLG		Annual

ITEMS ON THE COMMITTEES' POST-BIENNIAL AGENDAS THAT FALL UNDER THE PURVIEW OF THE BLG SUB-COMMITTEE ***

MARITIME SAFETY COMMITTEE (MSC) AND MARINE ENVIRONMENT PROTECTION COMMITTEE (MEPC)								
ACCEPTED POST-BIENNIAL OUTPUTS								
Number	Biennium approved	Reference to HLA	Description	Parent organ(s)	Coordinating organs(s)	Associated organ(s)	Timescale (sessions)	References
54	2012-2013	7.2.2	Safety aspects of alternative tanker designs assessed	MSC/MEPC	BLG		2	BLG 3/18, paragraph 15.7, Work on this output is to be carried out when a proposal for an alternative tanker design is submitted to the Organization.
55	2012-2013	5.2.1	Adoption of the revised IGC Code	MSC	BLG	DE/FP/SLF/STW	2	
4	7.2.2	7.2.2.2	Environmental aspects of alternative tanker designs	MEPC	BLG		Ongoing	BLG 3/18, paragraph 15.7

* * *

*** Refer to annex 38 of document MSC 91/22.

**DRAFT PROVISIONAL AGENDA OF THE BLG SUB-COMMITTEE
FOR THE NEXT SESSION**

- Opening of the session and election of the Chairman and Vice-Chairman for 2014
- 1 Adoption of the agenda
 - 2 Decisions of other IMO bodies
 - 3 Evaluation of safety and pollution hazards of chemicals and preparation of consequential amendments
 - 4 Additional guidelines for implementation of the BWM Convention
 - 5 Production of a manual entitled "Ballast Water Management – How to do it"
 - 6 Improved and new technologies approved for ballast water management systems and reduction of atmospheric pollution
 - 7 Development of international code of safety for ships using gases or other low-flashpoint fuels
 - 8 Consideration of the impact on the Arctic of emissions of Black Carbon from international shipping
 - 9 Review of relevant non-mandatory instruments as a consequence of the amended MARPOL Annex VI and the NO_x Technical Code
 - 10 Development of a Code for the transport and handling of limited amounts of hazardous and noxious liquid substances in bulk on offshore support vessels
 - 11 Casualty analysis
 - 12 Consideration of IACS unified interpretations
 - 13 Biennial agenda and provisional agenda for BLG 19
 - 14 Election of Chairman and Vice-Chairman for 2015
 - 15 Any other business
 - 16 Report to the Committees

ANNEX 44

BIENNIAL AGENDA FOR THE FSI SUB-COMMITTEE
AND PROVISIONAL AGENDA FOR FSI 22

SUB-COMMITTEE ON FLAG STATE IMPLEMENTATION (FSI)					
PLANNED OUTPUT 2014-2015		Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Target completion year
Number	Description				
1.1.2.1	Cooperation with FAO: preparation and holding of the third meeting of the Joint IMO/FAO Working Group on IUU fishing and related matters, including the adoption of a new treaty to facilitate the implementation of the technical provisions to the 1993 Torremolinos Protocol	MSC/MEPC	FSI/SLF		2013 <u>2015</u>
1.1.2.2	Cooperation with IACS: consideration of unified interpretations	MSC/MEPC		BLG/DE/FP/FSI/NAV/SLF	Continuous
1.1.2.5	Cooperation with ILO: development of PSC guidelines on seafarers' hours of rest taking into account <u>common areas in the PSC guidelines in the context of the Maritime Labour Convention, 2006, and relevant IMO instruments</u>	MSC	FSI	STW	2013 <u>2015</u>
1.1.2.8	<u>Report on</u> cooperation with data providers: protocols on data exchange with international, regional and national entities	MSC/MEPC/FAL/LEG/TCC	FSI/Secretariat	Secretariat	Continuous <u>Annual</u>
1.1.2.23	Policy input/guidance to ILO: development of PSC guidelines in the context of the Maritime Labour Convention, 2006	MSC	FSI		Continuous
1.1.2.24	Policy input/guidance to ILO/FAO: Preparation and holding of the third meeting of the Joint FAO/IMO ad hoc Working Group on IUU Fishing and Related Matters (JWG)	MSC	FSI	SLF	2013

SUB-COMMITTEE ON FLAG STATE IMPLEMENTATION (FSI)					
PLANNED OUTPUT 2014-2015		Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Target completion year
Number	Description				
1.1.2.26	<u>Report on</u> policy input/guidance to PSC regimes: related IMO developments	MSC/MEPC	FSI		Continuous <u>Annual</u>
2.0.1.8	Additional guidelines for implementation of the BWM Convention, including port State control	MEPC	BLG/FSI		2013 <u>2015</u>
2.0.1.13	Development of a Code for Recognized Organizations	MSC/MEPC	FSI		2013
2.0.1.18	Unified interpretations of the MARPOL regulations	MEPC	BLG/COMSAR/ DE/DSC/FP/ FSI/NAV/SLF/STW		Continuous
2.0.1.19	Comprehensive review of issues related to the responsibilities of Governments and development of measures to encourage flag State compliance	MSC/MEPC	FSI	FSI	Continuous
2.0.1.21	Summary reports and analyses of mandatory reports under MARPOL	MEPC	Secretariat	FSI	Continuous
2.0.1.22	GISIS module on mandatory and non-mandatory requirements	MSC/MEPC/FAL/ LEG/TCC	Secretariat	FSI	Annual
2.0.2.1	Review of the Code for the Implementation of Mandatory IMO Instruments and consolidated audit summary reports, adoption of the new IMO Instruments Implementation (III) Code and making the III Code and auditing mandatory <u>Review of consolidated audit summary reports and making the IMO Instruments Implementation Code (III Code) and auditing mandatory</u>	Assembly	Council	MSC/MEPC/FSI	2013 <u>2015</u>

SUB-COMMITTEE ON FLAG STATE IMPLEMENTATION (FSI)					
PLANNED OUTPUT 2014-2015		Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Target completion year
Number	Description				
4.0.2.1	Guidance on the establishment or further development of information systems (databases, websites, etc.) as part of GISIS Development, maintenance and enhancement of information systems and related guidance (GISIS, websites, etc.)	MSC/MEPC/FAL/LEG/TCC	Secretariat	FSI	Continuous
4.0.2.2	Development and management of mandatory IMO number schemes Review and management of the IMO ship identification number scheme (resolution A.600(15)) and company and registered owner number scheme (resolution MSC.160(78))	MSC	FSI	Secretariat	Continuous <u>Annual</u>
4.0.2.3	Protocols on data exchange with other international, regional and national data providers	MSC/MEPC/FAL/LEG/TCC	FSI	Secretariat	Continuous
5.1.2.1	Making the provisions of MSC.1/Circ.1206/Rev.1 mandatory	MSC	DE	FSI/NAV/STW	2013 <u>2015</u>
5.1.2.2	Development of measures to protect the safety of persons rescued at sea	MSC/FAL	COMSAR	FSI	2013 <u>2015</u>
5.2.1.7	Review of general cargo ship safety	MSC	FP	DE/DSC/FSI/NAV/SLF/STW	2013 <u>2014</u>
5.2.1.18	Development of a non-mandatory instrument on regulations for non-convention ships	MSC	FSI	BLG/COMSAR/DE/FP/NAV/SLF/STW	2013 <u>2017</u>

SUB-COMMITTEE ON FLAG STATE IMPLEMENTATION (FSI)					
PLANNED OUTPUT 2014-2015		Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Target completion year
Number	Description				
5.2.1.19	Review and update of the Survey Guidelines under the Harmonized System of Survey and Certification and the annexes to the Code for the Implementation of Mandatory IMO Instruments <u>Review and update of the Survey Guidelines under the Harmonized System of Survey and Certification and the non-exhaustive list of obligations under instruments relevant to the IMO Instruments Implementation Code (III Code)</u>	MSC/MEPC	FSI		2013 Continuous
5.3.1.2	Review of procedures for PSC	MSC/MEPC	FSI		2013
5.3.1.4	Promote the harmonization of PSC activities	MSC/MEPC	FSI		Continuous
5.3.1.5	Methodology for the in-depth analysis of annual PSC reports	MSC/MEPC	FSI		2013
5.3.1.6	A risk assessment comparison between marine casualties and incidents and PSC inspections	MSC/MEPC	FSI		Continuous
7.1.2.6	Measures to promote the AFS Convention	MEPC		FSI	2013
7.1.3.1	Reports on inadequacy of port reception facilities	MEPC	FSI		Annual
7.1.3.2	Follow-up to the implementation of the Action Plan on port reception facilities	MEPC	FSI		2013
8.0.3.2	Electronic access to, or electronic versions of, certificates and documents required to be carried on ships	FAL	MSC/MEPC/LEG	LEG/FSI	2013 <u>2015</u>
8.0.4.3	Identification and assessment of administrative requirements in mandatory IMO instruments that are perceived as being a burden	Council	MSC/MEPC/FAL/LEG/TCC	BLG/COMSAR/DE/DSC/FP/FSI/NAV/SLF/STW/Secretariat	2013

SUB-COMMITTEE ON FLAG STATE IMPLEMENTATION (FSI)					
PLANNED OUTPUT 2014-2015		Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Target completion year
Number	Description				
12.1.2.1	Collection and analysis of casualty and PSC data to identify trends and develop knowledge and risk-based recommendations	MSC/MEPC	FSI	BLG/COMSAR/DE/FP/NAV/STW	Continuous
Notes: Collection and analysis of casualty reports and related trends". Proposal to change High-level Action (12.1.2) text to "Undertake review of casualty reports submitted to IMO with a view to improving safety based on the lessons learned".					
12.3.1.1	Guidance on the development of GISIS and on access to information	MSC/MEPC	DSC/FSI	BLG/FP/NAV/STW	Continuous
Notes: Output to be renamed "Collection and analysis of casualty and PSC data to identify trends and develop knowledge and risk-based recommendations".					
12.3.1.2	PSC data collected and disseminated in cooperation with PSC regimes	MSC	FSI/ Secretariat	Secretariat	Annual
[12.3.1.3]*	Consideration of reports of incidents involving dangerous goods or marine pollutants in packaged form on board ships or in port areas	MSC/MEPC	DSC	FSI	Continuous
13.0.2.1	Guidance for the Secretariat on the development of GISIS and on access to information	MEPC	FSI		Continuous

* Notes: FSI 21: It was suggested that the DSC Sub-Committee review the need for this output which may be covered by amended output 12.3.1.1.

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PROVISIONAL AGENDA OF THE FSI SUB-COMMITTEE FOR THE NEXT SESSION

- Opening of the session and election of the Chairman and Vice-Chairman for 2014
- 1 Adoption of the agenda
 - 2 Decisions of other IMO bodies
 - 3 Responsibilities of Governments and measures to encourage flag State compliance
 - 4 Mandatory reports under MARPOL
 - 5 Casualty analysis and statistics
 - 6 Harmonization of port State control activities
 - 7 PSC Guidelines on seafarers' hours of rest and PSC Guidelines in relation to the Maritime Labour Convention, 2006
 - 8 Development of guidelines on port State control under the 2004 BWM Convention
 - 9 Comprehensive analysis of difficulties encountered in the implementation of IMO instruments
 - 10 Review and update of the Survey Guidelines under the Harmonized System of Survey and Certification (HSSC) and the non-exhaustive list of obligations under instruments relevant to the IMO Instruments Implementation Code (III Code)
 - 11 Consideration of IACS Unified Interpretations
 - 12 Measures to protect the safety of persons rescued at sea
 - 13 Illegal unregulated and unreported (IUU) fishing and related matters
 - 14 Review of general cargo ship safety
 - 15 Biennial agenda and provisional agenda for the next session of the Sub-Committee
 - 16 Election of Chairman and Vice-Chairman for 2015
 - 17 Any other business
 - 18 Report to the Committees

ANNEX 45

REPORT ON THE STATUS OF PLANNED OUTPUTS FOR THE MEPC FOR THE 2012-2013 BIENNIUM

Planned output number in the High-level Action Plan for 2012-2013 ^a	Description	Target completion year ^b	Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Status of output for Year 1 ^c	Status of output for Year 2 ^c	References ^d
1.1.1.1	Permanent analysis, demonstration and promotion of the linkage between a safe, secure, efficient and environmentally friendly maritime transport infrastructure, the development of global trade and the world economy and the achievement of the Millennium Development Goals (MDGs)	Continuous	Assembly	Council	MSC / MEPC / FAL / LEG / TCC / Secretariat	Ongoing	Ongoing	

Notes:

- ^a When individual output contains multiple deliverables, the format should be to report on each individual deliverables.
- ^b The target completion year should not be indicated by the number of sessions. It should be specified by year, or indicate that the item is continuous.
- ^c The entries under the "Status of output" columns are categorized as follows:
- "completed" if it signifies that the output in question has been duly finalized;
 - "in progress" if it signifies that the expected output has been progressed, often with interim outputs (for example. Draft amendments or guidelines) which are expected to be approved later in the same biennium;
 - "ongoing" if it signifies that the output relate to work of the respective IMO organs that is a permanent or continuous task; and
 - "postponed" if it signifies that the respective IMO organ has decided to defer the production of relevant outputs to another time (for example, until the receipt of corresponding submissions).
- ^d If the output consists of the adoption/approval of an instrument (e.g., resolution, circular, etc.), that instrument should be clearly referenced in this column.

Planned output number in the High-level Action Plan for 2012-2013 ^a	Description	Target completion year ^b	Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Status of output for Year 1 ^c	Status of output for Year 2 ^c	References ^d
1.1.2.1	Cooperation with FAO: preparation and holding of the third meeting of the Joint IMO/FAO Working Group on IUU fishing and related matters, including the adoption of a new treaty to facilitate the implementation of the technical provisions to the 1993 Torremolinos Protocol	2013	MSC / MEPC	FSI / SLF		In progress	In progress	MSC 89/25, paragraphs 9.15 to 9.38 and annex 18;
1.1.2.2	Cooperation with IACS: consideration of unified interpretations	Continuous	MSC / MEPC		BLG / DE / FP / FSI / NAV / SLF	Ongoing	Ongoing	MSC.1/Circs.14 16, 1422 to 1427, 1429, 1433 to 1437, LL.3/Circ.208; FP 56/23, section 9; MSC 78/26, paragraph 22.12
1.1.2.4	Cooperation with IAEA: formalized emergency arrangements for response to nuclear/radiological emergencies from ships, including IMO contribution to the next version of the "Joint Radiation Emergency Management Plan of the International Organizations"	Continuous	MSC / MEPC	Secretariat		Ongoing	Ongoing	

Planned output number in the High-level Action Plan for 2012-2013 ^a	Description	Target completion year ^b	Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Status of output for Year 1 ^c	Status of output for Year 2 ^c	References ^d
1.1.2.8	Cooperation with data providers: protocols on data exchange with international, regional and national entities	Continuous	MSC / MEPC / FAL / LEG	FSI Secretariat / Secretariat		Ongoing	Ongoing	
1.1.2.25	Policy input/guidance to ISO TC 8: development of industry consensus standards	Continuous	MSC / MEPC	Secretariat		Ongoing	Ongoing	
1.1.2.26	Policy input/guidance to PSC regimes: related IMO developments	Continuous	MSC / MEPC	FSI		Ongoing	Ongoing	Resolution A.1052(27) on Procedures for port State control, 2011
1.1.2.28	Policy input/guidance to Environment Management Group (established by UN General Assembly resolution 53/242): inter-agency sharing of information and agreement on priorities	Continuous	MEPC	Secretariat		Ongoing	Ongoing	
1.1.2.29	Policy input/guidance on GESAMP-related IMO developments	Continuous	MEPC	BLG		Ongoing	Ongoing	
1.1.2.30	Policy input/guidance to GESAMP-BW Working Group: evaluation of active substances used by ballast water management systems	Annual	MEPC	BLG		In progress	In progress	

Planned output number in the High-level Action Plan for 2012-2013 ^a	Description	Target completion year ^b	Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Status of output for Year 1 ^c	Status of output for Year 2 ^c	References ^d
1.1.2.31	Policy input/guidance to GESAMP-EHS Working Group: evaluation of bulk chemicals	Annual	MEPC	BLG		In progress	In progress	
1.1.2.32	Policy input/guidance to UNFCCC: greenhouse gas emissions from ships	Continuous	MEPC	BLG		Ongoing	Ongoing	
1.1.2.33	Policy input/guidance to UN Globally Harmonized System: classification and labelling of products	Continuous	MEPC	BLG		Ongoing	Ongoing	
1.1.2.34	Policy input/guidance to UN-Oceans: inter-agency coordination on oceans and coastal issues	Continuous	MEPC	Secretariat		Ongoing	Ongoing	
1.1.2.35	Policy input/guidance to UN Regular Process: assessment of the state of the marine environment	Continuous	MEPC	Secretariat		Ongoing	Ongoing	
1.1.2.44	Follow up to the 3rd meeting of the Joint ILO/IMO/BC Working Group on Ship Scrapping	2013	MEPC			In progress	In progress	
1.3.1.3	Identification of PSSAs, taking into account article 211 and other related articles of UNCLOS	Continuous	MEPC	NAV		Ongoing	Ongoing	

Planned output number in the High-level Action Plan for 2012-2013 ^a	Description	Target completion year ^b	Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Status of output for Year 1 ^c	Status of output for Year 2 ^c	References ^d
1.3.2.1	Contributions to UNCSD 2012 (Rio +20) and its preparatory meetings to showcase relevant work and follow-up to decisions of the Conference	2013	MEPC	Secretariat		In progress	In progress	
1.3.2.2	Capacity-building follow-up action to UNCSD reflected in the ITCP	Continuous	MEPC / TCC			Ongoing	Ongoing	TC 62/3 Biennial ITCP report
1.3.3.1	Hazard profiles and evaluation of newly submitted substances to be incorporated into the IBC Code	Continuous	MEPC	BLG		Ongoing	Ongoing	
1.3.3.2	Approval of ballast water management systems	Continuous	MEPC			Ongoing	Ongoing	
1.3.5.1	Harmonized provisions relating to the safe, secure and efficient carriage of dangerous goods following participation in the activities of UNCOE TDG, GHS and IAEA	Continuous	MSC / MEPC	DSC	Secretariat	Ongoing	Ongoing	
2.0.1.1	Amendments to relevant MARPOL Annexes I, II, IV, V and VI on regional arrangements for port reception facilities	2012	MEPC			Completed	Completed	Resolution MEPC.216(63) and MEPC.217(63)
2.0.1.7	Non-mandatory instruments: clarified boundaries between MARPOL and the London Convention 1972	2013	MEPC			In progress	Completed	LC-LP.1/57 MEPC.1/Cic.809

Planned output number in the High-level Action Plan for 2012-2013 ^a	Description	Target completion year ^b	Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Status of output for Year 1 ^c	Status of output for Year 2 ^c	References ^d
2.0.1.8	Additional guidelines for implementation of the BWM Convention, including port State control	2013	MEPC	BLG / FSI		In progress	In progress	
2.0.1.9	Non-mandatory instruments: guidelines for replacement engines not required to meet the Tier III limit (MARPOL Annex VI)	2013	MEPC	BLG		In progress	completed	Resolutions MEPC .237(65) and MEPC .238(65)
2.0.1.10	Revision of the standard specification for shipboard incinerators (resolution MEPC.76(40))	2013	MEPC	DE		In progress	In progress	
2.0.1.11	Non-mandatory instruments: other relevant guidelines pertaining to equivalents set forth in regulation 4 of MARPOL Annex VI and not covered by other guidelines	2013	MEPC	BLG		In progress	In progress	
2.0.1.12	Non-mandatory instruments: guidelines called for under paragraph 2.2.5.6 of the NOx Technical Code	2013	MEPC	BLG		In progress	In progress	
2.0.1.13	Development of a Code for Recognized Organizations	2013	MSC / MEPC	FSI		In progress	Completed	MEPC 64/23, annex 23 - MSC 91/22, annex 19

Planned output number in the High-level Action Plan for 2012-2013 ^a	Description	Target completion year ^b	Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Status of output for Year 1 ^c	Status of output for Year 2 ^c	References ^d
2.0.1.18	Unified interpretations of the MARPOL regulations	Continuous	MEPC	BLG/COMSAR /DE/DSC / FP / FSI / NAV / SLF / STW		Ongoing	Ongoing	MEPC.1/Circ.795; MEPC 64/23, annex 13 and annex 16
2.0.1.19	Comprehensive review of issues related to the responsibilities of Governments and development of measures to encourage flag State compliance	Continuous	MSC / MEPC	FSI		Ongoing	Ongoing	
2.0.1.20	Reports on the average sulphur content of residual fuel oil supplied for use on board ships	Continuous	MEPC	Secretariat		Ongoing	Ongoing	
2.0.1.21	Summary reports and analyses of mandatory reports under MARPOL	Continuous	MEPC	Secretariat	FSI	Ongoing	Ongoing	
2.0.1.22	GISIS module on mandatory and non-mandatory requirements	Annual	MSC / MEPC / FAL / LEG	Secretariat	FSI	In progress	In progress	
2.0.2.1	Review of the Code for the Implementation of Mandatory IMO Instruments and consolidated audit summary reports, adoption of the new IMO Instruments Implementation (III) Code and making the III Code and auditing mandatory	2013	Assembly	Council	MSC / MEPC / FSI	In progress	In progress	

Planned output number in the High-level Action Plan for 2012-2013 ^a	Description	Target completion year ^b	Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Status of output for Year 1 ^c	Status of output for Year 2 ^c	References ^d
2.0.2.2	Implementation of approved proposals for the further development of the Audit Scheme	Continuous	Assembly	Council	MSC / MEPC / FAL / LEG / TCC / Secretariat	Ongoing	Ongoing	
3.1.1.1	Guidance for the Secretariat concerning the environmental programmes and projects to which the Organization contributes or executes, such as GEF, UNDP, UNEP and World Bank projects or programmes, and the IMO/UNEP forum on regional cooperation to address marine pollution	Annual	MEPC			In progress	In progress	
3.1.1.2	Reports on partnership arrangements for, and on implementation of, environmental programmes	Annual	MEPC / TCC	Secretariat		In progress	In progress	TC 62/3 Biennial ITCP report; TC 62/6 Partnership for progress
3.1.2.1	Guidance for the Secretariat concerning partnerships with the industry (Global Initiative) aiming at promoting implementation of the OPRC Convention and the OPRC-HNS Protocol	Annual	MEPC			In progress	In progress	

Planned output number in the High-level Action Plan for 2012-2013 ^a	Description	Target completion year ^b	Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Status of output for Year 1 ^c	Status of output for Year 2 ^c	References ^d
3.4.1.1	Guidance on identifying the emerging needs of developing countries, in particular SIDS and LDCs	Continuous	MSC / MEPC / FAL / LEG / TCC			Ongoing	Ongoing	
3.5.1.3	Input to the ITCP on environmental protection	Continuous	MEPC			Ongoing	Ongoing	
4.0.1.7 (UO)	Proposals to ensure a forward-looking, efficient and cost-conscious Organization with strengthened and knowledge-based authority in global standard setting through the Secretary-General's Review and Reform mechanism	2013	Secretariat	Council	MSC / MEPC / FAL / LEG / TCC	In progress	In progress	
4.0.2.1	Guidance on the establishment or further development of information systems (databases, websites, etc.) as part of GISIS	Continuous	MSC / MEPC / FAL / LEG	Secretariat	FSI	Ongoing	Ongoing	
4.0.2.3	[Deleted] Protocols on data exchange with other international, regional and national data providers	Continuous	MSC / MEPC / FAL / LEG	FSI	Secretariat	Ongoing	Ongoing	

Planned output number in the High-level Action Plan for 2012-2013 ^a	Description	Target completion year ^b	Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Status of output for Year 1 ^c	Status of output for Year 2 ^c	References ^d
4.0.2.9	Electronic publications on preparedness for and response to accidental marine pollution produced jointly with the oil industry	2013	MEPC	Secretariat		In progress	In progress	
4.0.5.1	Revised committee guidelines on organization and method of work, as appropriate	Continuous	MSC / MEPC	Secretariat		Ongoing	Ongoing	
5.2.1.17	Development of a mandatory Code of ships operating in polar waters	2014	MSC / MEPC	DE	COMSAR / FP / NAV / SLF / STW	In progress	In progress	MEPC 65/22, section 11
5.2.1.19	Review and update of the Survey Guidelines under the Harmonized System of Survey and Certification and the annexes to the Code for the Implementation of Mandatory IMO Instruments	2013	MSC / MEPC	FSI		In progress	completed	MEPC 65/22, annex 34
5.2.2.2	Mandatory instruments: input regarding MARPOL, BWM and other environmental conventions	2013	MEPC			In progress	In progress	

Planned output number in the High-level Action Plan for 2012-2013 ^a	Description	Target completion year ^b	Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Status of output for Year 1 ^c	Status of output for Year 2 ^c	References ^d
5.2.3.3	Development of amendments to the IMSBC Code, including evaluation of properties of solid bulk cargoes	Continuous	MSC / MEPC	DSC		Ongoing	Ongoing	MSC 91/19/Add.1
5.2.3.7	Mandatory instruments: input regarding MARPOL Annexes I and II and the IBC Code	Continuous	MEPC			Ongoing	Ongoing	
5.2.3.8	Amendments to MARPOL Annex III, as required	Continuous	MEPC	DSC		Ongoing	Ongoing	
5.3.1.2	Review of procedures for PSC	2013	MSC / MEPC	FSI		In progress	In progress	
5.3.1.4	Promote the harmonization of PSC activities	Continuous	MSC / MEPC	FSI		Ongoing	Ongoing	
5.3.1.5	Methodology for the in-depth analysis of annual PSC reports	2013	MSC / MEPC	FSI		In progress	Completed	
5.3.1.6	A risk assessment comparison between marine casualties and incidents and PSC inspections	Continuous	MSC / MEPC	FSI		Ongoing	Completed	
5.4.1.1	Guidelines on how to present relevant information to seafarers	2013	MSC / MEPC	STW		Postponed	Completed	
7.1.1.1	Follow-up to the GESAMP study on "Estimates of Oil Entering the Marine Environment from Sea-based Activities"	2013	MEPC			In progress	In progress	

Planned output number in the High-level Action Plan for 2012-2013 ^a	Description	Target completion year ^b	Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Status of output for Year 1 ^c	Status of output for Year 2 ^c	References ^d
7.1.1.2	Technical guidance for the Secretariat for the development, on the basis of reporting requirements under MARPOL, OPRC and the OPRC-HNS Protocol, as well as other relevant sources of information, of a pollution incident information structure for regular reporting to the FSI and BLG Sub-Committees, and/or the MEPC	2013	MEPC			In progress	In progress	
7.1.2.1	Mandatory instruments: follow-up to the Hong Kong Convention on Ship Recycling, including development and adoption of associated guidelines	2013	MEPC			In progress	In progress	
7.1.2.2	Mandatory instruments: designation of Special Areas and PSSAs and adoption of their associated protective measures	Continuous	MEPC	NAV		Ongoing	Ongoing	
7.1.2.3	Provisions for the reduction of noise from commercial shipping and its adverse impacts on marine life	2013	MEPC	DE		In progress	In progress	

Planned output number in the High-level Action Plan for 2012-2013 ^a	Description	Target completion year ^b	Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Status of output for Year 1 ^c	Status of output for Year 2 ^c	References ^d
7.1.2.4	Approved ballast water management systems	Continuous	MEPC			Ongoing	Ongoing	
7.1.2.5	[placed on the post biennial agenda] Production of a manual entitled "Ballast Water Management – How to do it"		MEPC	BLG		Postponed	Postponed	
7.1.2.6	Measures to promote the AFS Convention	2013	MEPC		FSI	In progress	Completed	
7.1.2.7	Manual on chemical pollution to address legal and administrative aspects of HNS incidents	2013	MEPC			In progress	In progress	
7.1.2.8	Guidance on biofouling for recreational craft less than 24 metres in length	2012	MEPC	BLG	DE	Completed	Completed	MEPC 64/11 para 3.6
7.1.2.9	Technical guidelines on sunken oil assessment and removal techniques	2013	MEPC			In progress	Completed	MEPC 65/22, para 8.11
7.1.2.10	Guide on Oil Spill Response in Ice and Snow Conditions	2014	MEPC			In progress	In progress	
7.1.2.11	Updated IMO Dispersant Guidelines	2014	MEPC			In progress	completed	MEPC 65/22, para 8.7
7.1.2.12	Guideline for oil spill response – offshore in situ burning	2013	MEPC			In progress	Completed	MEPC 65/22, para 8.9
7.1.2.13	Guidance on obligations and actions required by States to prepare for implementation of the OPRC-HNS Protocol	2012	MEPC			Completed		

Planned output number in the High-level Action Plan for 2012-2013 ^a	Description	Target completion year ^b	Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Status of output for Year 1 ^c	Status of output for Year 2 ^c	References ^d
7.1.2.14	Revision of the revised guidelines on implementation of effluent standards and performance tests for sewage treatment plants (resolution MEPC.159(55))	2012	MEPC	DE		Completed		Resolution MEPC.227(64)
7.1.2.15	Development of a Code for the transport and handling of limited amounts of hazardous and noxious liquid substances in bulk on offshore support vessels	2013	MSC / MEPC	BLG	DE	In progress	In progress	
7.1.2.16	Development of guidance on the safe operation and performance standards of oil pollution combating equipment	2014	MEPC		DE	In progress	In progress	
7.1.2.17	Development of guidance for international offers of assistance in response to a marine oil pollution incident	2014	MEPC			In progress	In progress	
7.1.2.18	Method to undertake environmental risk and response benefit assessments	2013	MEPC			In progress	In progress	
7.1.2.19	Development of criteria for the evaluation of environmentally hazardous solid bulk cargoes in relation to the revised MARPOL Annex V	2012	MEPC			Completed		DSC 17/17 SEC 9, Resolution MEPC.219(63), MEPC.1/Circ.791

Planned output number in the High-level Action Plan for 2012-2013 ^a	Description	Target completion year ^b	Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Status of output for Year 1 ^c	Status of output for Year 2 ^c	References ^d
7.1.2.20 (UO)	Development of international measures for minimizing the transfer of invasive aquatic species through biofouling of ships	2013	MSC / MEPC	BLG	DE	In progress	Completed	MEPC .1/Circ.811
7.1.3.1	Reports on inadequacy of port reception facilities	Annual	MEPC	FSI		In progress	In progress	
7.1.3.2	Follow-up to the implementation of the Action Plan on port reception facilities	2013	MEPC	FSI		In progress	Completed	
7.1.4.1	Action Plan, as required, on prevention and control of marine pollution from small craft, including development of appropriate measures	Continuous	MEPC			Ongoing	Ongoing	
7.2.1.2	Input to the review of the guidelines on the identification of places of refuge with regard to marine environment protection	Continuous	MEPC			Ongoing	Ongoing	
7.2.2.2	Environmental aspects of alternative tanker designs	Continuous	MSC / MEPC	BLG	DE	Ongoing	Ongoing	
7.2.2.3	Evaluation of safety and pollution hazards of chemicals and preparation of consequential amendments	Continuous	MEPC	BLG		Ongoing	Ongoing	

Planned output number in the High-level Action Plan for 2012-2013 ^a	Description	Target completion year ^b	Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Status of output for Year 1 ^c	Status of output for Year 2 ^c	References ^d
7.2.3.1	Increased activities within the ITCP regarding the OPRC Convention and the OPRC HNS Protocol	Annual	MEPC / TCC	Secretariat		In progress	In progress	TC 62/3 Biennial ITCP report
7.3.1.1	Review of relevant non-mandatory instruments as a consequence of the amended MARPOL Annex VI and the NOx Technical Code	2013	MEPC	BLG		In progress	In progress	
7.3.2.1	Further development of mechanisms needed to achieve the limitation or reduction of CO ₂ emissions from international shipping	Annual	MEPC			In progress	In progress	Resolution MEPC 224(64); MEPC 64/23 Annex 9
7.3.2.2	Keep under review IMO measures and contributions to international climate mitigation initiatives and agreements (including CO ₂ sequestration and ocean fertilization as well as consideration of the impact on the Arctic emissions of Black Carbon from international shipping)	Annual	MEPC		BLG	In progress	In progress	
7.4.1.1	Follow up to the updated Action Plan on the Organization's strategy to address human element (MSC-MEPC.7/Circ.4)	Continuous	MEPC			Ongoing	Ongoing	

Planned output number in the High-level Action Plan for 2012-2013 ^a	Description	Target completion year ^b	Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Status of output for Year 1 ^c	Status of output for Year 2 ^c	References ^d
8.0.3.2	Electronic access to, or electronic versions of, certificates and documents required to be carried on ships	2013	FAL	MSC / MEPC / LEG	LEG / FSI	In progress	In progress	
8.0.4.3	Identification and assessment of administrative requirements in mandatory IMO instruments that are perceived as being a burden	2013	Council	MSC / MEPC / FAL / LEG	BLG / COMSAR / DE / DSC / FP / FSI / NAV / SLF / STW / Secretariat		In progress	
9.0.1.3	Provision of reception facilities under MARPOL in SIDS	Continuous	MEPC			Completed	Completed	MEPC.221(63)
10.0.1.2	Development of goal-based ship construction standards for all types of ships, including safety, security and protection of the marine environment	2013	MSC / MEPC			In progress	In progress	MSC 90/28, section 5
11.1.1.1	Permanent analysis, demonstration and promotion of the linkage between a safe, secure, efficient and environmentally friendly maritime transport infrastructure, the development of global trade and the world economy and the achievement of the MDGs	Continuous	Assembly	Council	MSC / MEPC / FAL / LEG / TCC / Secretariat	Ongoing	Ongoing	

Planned output number in the High-level Action Plan for 2012-2013 ^a	Description	Target completion year ^b	Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Status of output for Year 1 ^c	Status of output for Year 2 ^c	References ^d
11.1.1.6	Measures to promote the "IMO Children's Ambassador" concept, in collaboration with junior marine environment protection associations worldwide	2013	MEPC			In progress	In progress	
12.1.2.1	Collection and analysis of casualty and PSC data to identify trends and develop knowledge and risk-based recommendations	Continuous	MSC / MEPC	FSI	BLG / COMSAR / DE / FP / NAV / STW	Ongoing	Ongoing	
12.2.1.1	Guidelines and associated training to assist companies and seafarers in improving the implementation of the ISM Code	2012	MSC / MEPC	STW		In progress	Completed	JWGHE as coordinating organ
12.2.1.2	Revised guidelines for Administrations (resolution A.913(22)) to make them more effective and user-friendly	2012	MSC / MEPC	STW		In progress	Completed	JWGHE as coordinating organ
12.2.1.3	Enhancing the efficiency and user-friendliness of ISM Code	2013	MSC / MEPC	STW		In progress	Completed	JWGHE as coordinating organ
12.3.1.1	Guidance on the development of GISIS and on access to information	Continuous	MSC / MEPC	FSI		Ongoing	Ongoing	

Planned output number in the High-level Action Plan for 2012-2013 ^a	Description	Target completion year ^b	Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Status of output for Year 1 ^c	Status of output for Year 2 ^c	References ^d
12.3.1.3	Consideration of reports of incidents involving dangerous goods or marine pollutants in packaged form on board ships or in port areas	Continuous	MSC / MEPC	DSC	FSI	Ongoing	Ongoing	
12.3.1.4	Maintain an updated web-based inventory of OPRC/HNS related information, including R&D projects and best practices	Continuous	MEPC			Ongoing	Ongoing	
12.4.1.1	Guidelines and MEPC circulars	Continuous	MEPC			Ongoing	Ongoing	
13.0.2.1	Guidance for the Secretariat on the development of GISIS and on access to information	Continuous	MEPC	FSI		Ongoing	Ongoing	
13.0.2.2	Databases as part of GISIS and other means, including electronic ones	Continuous	MSC / MEPC / FAL / LEG	Secretariat		Ongoing	Ongoing	
13.0.3.1	Improved and new technologies approved for ballast water management systems and reduction of atmospheric pollution	Annual	MEPC	BLG		In progress	In progress	

ANNEX 46

PROPOSALS FOR THE HIGH-LEVEL ACTION PLAN OF THE ORGANIZATION AND PRIORITIES FOR THE 2014-2015 BIENNIUM FOR THE MARINE ENVIRONMENT PROTECTION COMMITTEE¹

MARINE ENVIRONMENT PROTECTION COMMITTEE (MEPC)					
PLANNED OUTPUTS 2012-2013 WITH STATUS NOTES		Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Target completion year
Number	Description				
1.1.1.1	Permanent analysis, demonstration and promotion of the linkage between a safe, secure, efficient and environmentally friendly maritime transport infrastructure, the development of global trade and the world economy and the achievement of the Millennium Development Goals (MDGs)	Assembly	Council	MSC / MEPC / FAL / LEG / TCC / Secretariat	Continuous
1.1.2.1	Cooperation with FAO: preparation and holding of the third meeting of the Joint IMO/FAO Working Group on IUU fishing and related matters, including the adoption of a new treaty to facilitate the implementation of the technical provisions to the 1993 Torremolinos Protocol	MSC / MEPC	FSI / SLF		2013
Notes: Target completion year extended to 2014. Output to be renamed "Cooperation with FAO: preparation and holding of the third meeting of the Joint IMO/FAO Working Group on IUU fishing and related matters"					

¹ Proposed modifications to the outputs in the 2012-2013 biennium are contained in the "Notes" section only when changes are proposed.

MARINE ENVIRONMENT PROTECTION COMMITTEE (MEPC)					
PLANNED OUTPUTS 2012-2013 WITH STATUS NOTES		Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Target completion year
Number	Description				
1.1.2.2	Cooperation with IACS: consideration of unified interpretations	MSC / MEPC		BLG / DE / FP / FSI / NAV / SLF	Continuous
Notes: To add "IACS before "unified interpretations". To have all sub-committees as "associated" organs.					
1.1.2.4	Cooperation with IAEA: formalized emergency arrangements for response to nuclear/radiological emergencies from ships, including IMO contribution to the next version of the "Joint Radiation Emergency Management Plan of the International Organizations"	MSC / MEPC	Secretariat		Continuous
1.1.2.8	Cooperation with data providers: protocols on data exchange with international, regional and national entities	MSC / MEPC / FAL / LEG	FSI / Secretariat	Secretariat	Continuous
Notes: Target completion year changed to "Annual". Words "Report on" to be added at the beginning of the output name.					
1.1.2.25	Policy input/guidance to ISO TC 8: development of industry consensus standards	MSC / MEPC	Secretariat		Continuous
1.1.2.26	Policy input/guidance to PSC regimes: related IMO developments	MSC / MEPC	FSI		Continuous
Notes: Target completion year changed to "Annual". Words "Report on" to be added at the beginning of the output name.					
1.1.2.28	Policy input/guidance to Environment Management Group (established by United Nations General Assembly resolution 53/242): inter-agency sharing of information and agreement on priorities	MEPC	Secretariat		Continuous

MARINE ENVIRONMENT PROTECTION COMMITTEE (MEPC)					
PLANNED OUTPUTS 2012-2013 WITH STATUS NOTES		Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Target completion year
Number	Description				
1.1.2.29	Policy input/guidance on GESAMP-related IMO developments	MEPC	BLG		Continuous
1.1.2.30	Policy input/guidance to GESAMP-BW Working Group: evaluation of active substances used by ballast water management systems	MEPC	BLG		Annual
Notes: Words "Report on" will be added at the beginning of the output name.					
1.1.2.31	Policy input/guidance to GESAMP-EHS Working Group: evaluation of bulk chemicals	MEPC	BLG		Annual
Notes: Words "Report on" will be added at the beginning of the output name.					
1.1.2.32	Policy input/guidance to UNFCCC: greenhouse gas emissions from ships	MEPC	BLG		Continuous
1.1.2.33	Policy input/guidance to UN Globally Harmonized System: classification and labelling of products	MEPC	BLG		Continuous
1.1.2.34	Policy input/guidance to UN-Oceans: inter-agency coordination on oceans and coastal issues	MEPC	Secretariat		Continuous
1.1.2.35	Policy input/guidance to UN Regular Process: assessment of the state of the marine environment	MEPC	Secretariat		Continuous
1.1.2.44	Follow-up to the 3rd meeting of the Joint ILO/IMO/BC Working Group on Ship Scrapping	MEPC			2013
Notes: To be included in the 2014-2015 biennium.					

MARINE ENVIRONMENT PROTECTION COMMITTEE (MEPC)					
PLANNED OUTPUTS 2012-2013 WITH STATUS NOTES		Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Target completion year
Number	Description				
1.3.1.3	Identification of PSSAs, taking into account article 211 and other related articles of UNCLOS	MEPC	NAV		Continuous
1.3.2.1	Contributions to UNCSD 2012 (Rio+20) and its preparatory meetings to showcase relevant work and follow-up to decisions of the Conference	MEPC	Secretariat		2013
Notes: To be included in the 2014-2015 biennium and to be renamed "Follow-up to UNCSD 2012 (Rio+20)".					
1.3.2.2	Capacity-building follow-up action to UNCSD reflected in the ITCP	MEPC / TCC			Continuous
1.3.3.1	Hazard profiles and evaluation of newly submitted substances to be incorporated into the IBC Code	MEPC	BLG		Continuous
1.3.3.2	Approval of ballast water management systems	MEPC			Continuous
1.3.5.1	Harmonized provisions relating to the safe, secure and efficient carriage of dangerous goods following participation in the activities of UNCOE TDG, GHS and IAEA	MSC / MEPC	DSC	Secretariat	Continuous
2.0.1.1	Amendments to relevant MARPOL Annexes I, II, IV, V and VI on regional arrangements for port reception facilities	MEPC			2012
Notes: The work on this output is completed.					
2.0.1.7	Non-mandatory instruments: clarified boundaries between MARPOL and the London Convention 1972	MEPC			2013
Notes: The work on this output is completed.					

MARINE ENVIRONMENT PROTECTION COMMITTEE (MEPC)					
PLANNED OUTPUTS 2012-2013 WITH STATUS NOTES		Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Target completion year
Number	Description				
2.0.1.8	Additional guidelines for implementation of the BWM Convention, including port State control	MEPC	BLG / FSI		2013
Notes: To be included in the 2014-2015 biennium.					
2.0.1.9	Non-mandatory instruments: guidelines for replacement engines not required to meet the Tier III limit (MARPOL Annex VI)	MEPC	BLG		2013
Notes: The work on this output is completed.					
2.0.1.10	Revision of the standard specification for shipboard incinerators (resolution MEPC.76(40))	MEPC	DE		2013
Notes: To be included in the 2014-2015 biennium.					
2.0.1.11	Non-mandatory instruments: other relevant guidelines pertaining to equivalents set forth in regulation 4 of MARPOL Annex VI and not covered by other guidelines	MEPC	BLG		2013
Notes: To be included in the 2014-2015 biennium.					
2.0.1.12	Non-mandatory instruments: guidelines called for under paragraph 2.2.5.6 of the NO _x Technical Code	MEPC	BLG		2013
Notes: To be included in the 2014-2015 biennium.					
2.0.1.13	Development of a Code for Recognized Organizations	MSC / MEPC	FSI		2013
Notes: The work on this output is completed.					

MARINE ENVIRONMENT PROTECTION COMMITTEE (MEPC)					
PLANNED OUTPUTS 2012-2013 WITH STATUS NOTES		Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Target completion year
Number	Description				
2.0.1.18	Unified interpretations of the MARPOL regulations	MEPC	BLG / COMSAR / DE / DSC / FP / FSI / NAV / SLF / STW		Continuous
2.0.1.19	Comprehensive review of issues related to the responsibilities of Governments and development of measures to encourage flag State compliance	MSC / MEPC	FSI		Continuous
2.0.1.20	Reports on the average sulphur content of residual fuel oil supplied for use on board ships	MEPC	Secretariat		Continuous
2.0.1.21	Summary reports and analyses of mandatory reports under MARPOL	MEPC	Secretariat	FSI	Continuous
2.0.1.22	GISIS module on mandatory and non-mandatory requirements	MSC / MEPC / FAL / LEG	Secretariat	FSI	Annual
Notes: To be included in the 2014-2015 biennium.					
2.0.2.1	Review of the Code for the Implementation of Mandatory IMO Instruments and consolidated audit summary reports, adoption of the new IMO Instruments Implementation (III) Code and making the III Code and auditing mandatory	Assembly	Council	MSC / MEPC / FSI	2013
Notes: Target completion year extended to 2015. Output to be renamed "Review of consolidated audit summary reports and making the IMO instruments implementation Code (III Code) and auditing mandatory".					

MARINE ENVIRONMENT PROTECTION COMMITTEE (MEPC)					
PLANNED OUTPUTS 2012-2013 WITH STATUS NOTES		Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Target completion year
Number	Description				
2.0.2.2	Implementation of approved proposals for the further development of the Audit Scheme	Assembly	Council	MSC / MEPC / FAL / LEG / TCC / Secretariat	Continuous
3.1.1.1	Guidance for the Secretariat concerning the environmental programmes and projects to which the Organization contributes or executes, such as GEF, UNDP, UNEP and World Bank projects or programmes, and the IMO/UNEP forum on regional cooperation to address marine pollution	MEPC			Annual
Notes: To be included in the 2014-2015 biennium.					
3.1.1.2	Reports on partnership arrangements for, and on implementation of, environmental programmes	MEPC / TCC	Secretariat		Annual
Notes: To be included in the 2014-2015 biennium.					
3.1.2.1	Guidance for the Secretariat concerning partnerships with the industry (Global Initiative) aiming at promoting implementation of the OPRC Convention and the OPRC-HNS Protocol	MEPC			Annual
Notes: To be included in the 2014-2015 biennium.					
3.4.1.1	Guidance on identifying the emerging needs of developing countries, in particular SIDS and LDCs	MSC / MEPC / FAL / LEG / TCC			Continuous
3.5.1.3	Input to the ITCP on environmental protection	MEPC			Continuous

MARINE ENVIRONMENT PROTECTION COMMITTEE (MEPC)					
PLANNED OUTPUTS 2012-2013 WITH STATUS NOTES		Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Target completion year
Number	Description				
4.0.1.7 (UO)	Proposals to ensure a forward-looking, efficient and cost-conscious Organization with strengthened and knowledge-based authority in global standard setting through the Secretary-General's Review and Reform mechanism	Secretariat	Council	MSC / MEPC / FAL / LEG / TCC	2013
4.0.2.1	Guidance on the establishment or further development of information systems (databases, websites, etc.) as part of GISIS	MSC / MEPC / FAL / LEG	Secretariat	FSI	Continuous
Notes Output to be renamed "Development, maintenance and enhancement of information systems and related guidance (GISIS, websites, etc.)".					
4.0.2.3	[Deleted] Protocols on data exchange with other international, regional and national data providers	MSC / MEPC / FAL / LEG	FSI	Secretariat	Continuous
Notes: Duplicate to be deleted and keep only output 1.1.2.8.					
4.0.2.9	Electronic publications on preparedness for and response to accidental marine pollution produced jointly with the oil industry	MEPC	Secretariat		2013
Notes: To be included in the 2014-2015 biennium.					
4.0.5.1	Revised committee guidelines on organization and method of work, as appropriate	MSC / MEPC	Secretariat		Continuous
5.2.1.17	Development of a mandatory Code of ships operating in polar waters	MSC / MEPC	DE	COMSAR / FP / NAV / SLF / STW	2014

MARINE ENVIRONMENT PROTECTION COMMITTEE (MEPC)					
PLANNED OUTPUTS 2012-2013 WITH STATUS NOTES		Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Target completion year
Number	Description				
5.2.1.19	Review and update of the Survey Guidelines under the Harmonized System of Survey and Certification and the annexes to the Code for the Implementation of Mandatory IMO Instruments	MSC / MEPC	FSI		2013
Notes: Target completion year changed to "Continuous". Output to be renamed "Review and update of the Survey Guidelines under the Harmonized System of Survey and Certification and the non-exhaustive list of obligations under instruments relevant to the IMO Instruments Implementation Code (III Code)".					
5.2.2.2	Mandatory instruments: input regarding MARPOL, BWM and other environmental conventions	MEPC			2013
Notes: To be included in the 2014-2015 biennium.					
5.2.3.3	Development of amendments to the IMSBC Code, including evaluation of properties of solid bulk cargoes	MSC / MEPC	DSC		Continuous
Notes: Output to be renamed "Development of amendments to the IMSBC Code and supplements".					
5.2.3.7	Mandatory instruments: input regarding MARPOL Annexes I and II and the IBC Code	MEPC			Continuous
5.2.3.8	Amendments to MARPOL Annex III, as required	MEPC	DSC		Continuous
5.3.1.2	Review of procedures for PSC	MSC / MEPC	FSI		2013
Notes: FSI 21: Duplication. To be deleted and to keep only output 5.3.1.4.					
5.3.1.4	Promote the harmonization of PSC activities	MSC / MEPC	FSI		Continuous

MARINE ENVIRONMENT PROTECTION COMMITTEE (MEPC)					
PLANNED OUTPUTS 2012-2013 WITH STATUS NOTES		Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Target completion year
Number	Description				
5.3.1.5	Methodology for the in-depth analysis of annual PSC reports	MSC / MEPC	FSI		2013
Notes: Work on this output is completed.					
5.3.1.6	A risk assessment comparison between marine casualties and incidents and PSC inspections	MSC / MEPC	FSI		Continuous
Notes: Work on this output is completed.					
5.4.1.1	Guidelines on how to present relevant information to seafarers	MSC / MEPC	STW		2013
Notes: Work on this output is completed.					
7.1.1.1	Follow-up to the GESAMP study on "Estimates of Oil Entering the Marine Environment from Sea-based Activities"	MEPC			2013
Notes: To be included in the 2014-2015 biennium.					
7.1.1.2	Technical guidance for the Secretariat for the development, on the basis of reporting requirements under MARPOL, OPRC and the OPRC-HNS Protocol, as well as other relevant sources of information, of a pollution incident information structure for regular reporting to the FSI and BLG Sub-Committees and/or the MEPC	MEPC			2013
Notes: To be included in the 2014-2015 biennium.					

MARINE ENVIRONMENT PROTECTION COMMITTEE (MEPC)					
PLANNED OUTPUTS 2012-2013 WITH STATUS NOTES		Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Target completion year
Number	Description				
7.1.2.1	Mandatory instruments: follow-up to the Hong Kong Convention on Ship Recycling, including development and adoption of associated guidelines	MEPC			2013
Notes: To be included in the 2014-2015 biennium.					
7.1.2.2	Mandatory instruments: designation of Special Areas and PSSAs and adoption of their associated protective measures	MEPC	NAV		Continuous
7.1.2.3	Provisions for the reduction of noise from commercial shipping and its adverse impacts on marine life	MEPC	DE		2013
Notes: Target completion year extended to 2014.					
7.1.2.4	Approved ballast water management systems	MEPC			Continuous
7.1.2.5	Production of a manual entitled "Ballast Water Management – How to do it"	MEPC	BLG		
Notes: To be included in the post-biennial agenda.					
7.1.2.6	Measures to promote the AFS Convention	MEPC		FSI	2013
Notes: Work on this output is completed.					
7.1.2.7	Manual on chemical pollution to address legal and administrative aspects of HNS incidents	MEPC			2013
Notes: Target completion year extended to 2014.					

MARINE ENVIRONMENT PROTECTION COMMITTEE (MEPC)					
PLANNED OUTPUTS 2012-2013 WITH STATUS NOTES		Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Target completion year
Number	Description				
7.1.2.8	Guidance on biofouling for recreational craft less than 24 m in length	MSC / MEPC	BLG	DE	2012
Notes: Work on this output is completed.					
7.1.2.9	Technical guidelines on sunken oil assessment and removal techniques	MEPC			2013
Notes: Work on this output is completed.					
7.1.2.10	Guide on Oil Spill Response in Ice and Snow Conditions	MEPC			2014
7.1.2.11	Updated IMO Dispersant Guidelines	MEPC			2014
Notes: Work on this output is completed.					
7.1.2.12	Guideline for oil spill response – offshore in situ burning	MEPC			2013
Notes: Work on this output is completed.					
7.1.2.13	Guidance on obligations and actions required by States to prepare for implementation of the OPRC-HNS Protocol	MEPC			2012
Notes: Work on this output is completed					
7.1.2.14	Revision of the revised guidelines on implementation of effluent standards and performance tests for sewage treatment plants (resolution MEPC.159(55))	MEPC	DE		2012
Notes: Work on this output is completed.					

MARINE ENVIRONMENT PROTECTION COMMITTEE (MEPC)					
PLANNED OUTPUTS 2012-2013 WITH STATUS NOTES		Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Target completion year
Number	Description				
7.1.2.15	Development of a Code for the transport and handling of limited amounts of hazardous and noxious liquid substances in bulk on offshore support vessels	MSC / MEPC	BLG	DE	2013
Notes: Target completion year extended to 2015.					
7.1.2.16	Development of guidance on the safe operation and performance standards of oil pollution combating equipment	MEPC		DE	2014
7.1.2.17	Development of guidance for international offers of assistance in response to a marine oil pollution incident	MEPC			2014
7.1.2.18	Method to undertake environmental risk and response benefit assessments	MEPC			2013
Notes: To be included in 2014-2015 biennium.					
7.1.2.19	Development of criteria for the evaluation of environmentally hazardous solid bulk cargoes in relation to the revised MARPOL Annex V	MEPC			2012
Notes: Work on this output is completed.					
7.1.2.20 (UO)	Development of international measures for minimizing the transfer of invasive aquatic species through biofouling of ships	MSC / MEPC	BLG	DE	2013
Notes: Work on this output is completed.					
7.1.3.1	Reports on inadequacy of port reception facilities	MEPC	FSI		Annual
Notes: To be included in the 2014-2015 biennium.					

MARINE ENVIRONMENT PROTECTION COMMITTEE (MEPC)					
PLANNED OUTPUTS 2012-2013 WITH STATUS NOTES		Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Target completion year
Number	Description				
7.1.3.2	Follow-up to the implementation of the Action Plan on port reception facilities	MEPC	FSI		2013
Notes: Work on this output is completed.					
7.1.4.1	Action Plan, as required, on prevention and control of marine pollution from small craft, including development of appropriate measures	MEPC			Continuous
7.2.1.2	Input to the review of the guidelines on the identification of places of refuge with regard to marine environment protection	MEPC			Continuous
7.2.2.2	Environmental aspects of alternative tanker designs	MSC / MEPC	BLG	DE	Continuous
Notes: To be deleted and move to post-biennial agenda.					
7.2.2.3	Evaluation of safety and pollution hazards of chemicals and preparation of consequential amendments	MEPC	BLG		Continuous
7.2.3.1	Increased activities within the ITCP regarding the OPRC Convention and the OPRC HNS Protocol	MEPC / TCC	Secretariat		Annual
Notes: To be included in 2014-2015 biennium.					
7.3.1.1	Review of relevant non-mandatory instruments as a consequence of the amended MARPOL Annex VI and the NO _x Technical Code	MEPC	BLG		2013
Notes: To be included in the 2014-2015 biennium.					

MARINE ENVIRONMENT PROTECTION COMMITTEE (MEPC)					
PLANNED OUTPUTS 2012-2013 WITH STATUS NOTES		Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Target completion year
Number	Description				
7.3.2.1	Further development of mechanisms needed to achieve the limitation or reduction of CO ₂ emissions from international shipping	MEPC			Annual
Notes: To be included in the 2014-2015 biennium.					
7.3.2.2	Keep under review IMO measures and contributions to international climate mitigation initiatives and agreements (including CO ₂ sequestration and ocean fertilization as well as consideration of the impact on the Arctic emissions of Black Carbon from international shipping)	MEPC		BLG	Annual
Notes: To be included in the 2014-2015 biennium.					
7.4.1.1	Follow-up to the updated Action Plan on the Organization's strategy to address human element (MSC-MEPC.7/Circ.4)	MEPC			Continuous
8.0.3.2	Electronic access to, or electronic versions of, certificates and documents including record books required to be carried on ships	FAL	MSC / MEPC / LEG	LEG / FSI	2013
Notes: Target completion year extended to 2015.					
8.0.4.3	Identification and assessment of administrative requirements in mandatory IMO instruments that are perceived as being a burden	Council	MSC / MEPC / FAL / LEG	BLG / COMSAR / DE / DSC / FP / FSI / NAV / SLF / STW / Secretariat	2013

MARINE ENVIRONMENT PROTECTION COMMITTEE (MEPC)					
PLANNED OUTPUTS 2012-2013 WITH STATUS NOTES		Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Target completion year
Number	Description				
9.0.1.3	Provision of reception facilities under MARPOL in SIDS	MEPC			Continuous
10.0.1.2	Development of goal-based ship construction standards for all types of ships, including safety, security and protection of the marine environment	MSC / MEPC			2013
Notes: Target completion year extended to 2015.					
11.1.1.1	Permanent analysis, demonstration and promotion of the linkage between a safe, secure, efficient and environmentally friendly maritime transport infrastructure, the development of global trade and the world economy and the achievement of the MDGs	Assembly	Council	MSC / MEPC / FAL / LEG / TCC / Secretariat	Continuous
11.1.1.6	Measures to promote the "IMO Children's Ambassador" concept, in collaboration with junior marine environment protection associations worldwide	MEPC			2013
12.1.2.1	Collection and analysis of casualty and PSC data to identify trends and develop knowledge and risk-based recommendations	MSC / MEPC	FSI	BLG / DE / FP / NAV / STW	Continuous
Notes: Output to be renamed "Analysis of casualty reports and related trends". Proposal to change High-level Action (12.1.2) text to "Undertake review of casualty reports submitted to IMO with a view to improving safety based on the lessons learned".					
12.2.1.1	Guidelines and associated training to assist companies and seafarers in improving the implementation of the ISM Code	MSC / MEPC	STW		2012
Notes: Work on this output is completed.					

MARINE ENVIRONMENT PROTECTION COMMITTEE (MEPC)					
PLANNED OUTPUTS 2012-2013 WITH STATUS NOTES		Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Target completion year
Number	Description				
12.2.1.2	Revised guidelines for Administrations (resolution A.913(22)) to make them more effective and user-friendly	MSC / MEPC	STW		2012
Notes: Work on this output is completed.					
12.2.1.3	Enhancing the efficiency and user-friendliness of ISM Code	MSC / MEPC	STW		2013
Notes: Work on this output is completed.					
12.3.1.1	Guidance on the development of GISIS and on access to information	MSC / MEPC	FSI	BLG / DSC / FP / NAV / STW	Continuous
Notes: Output to be renamed "Collection and analysis of casualty and PSC data to identify trends and develop knowledge and risk-based recommendations".					
12.3.1.3	Consideration of reports of incidents involving dangerous goods or marine pollutants in packaged form on board ships or in port areas	MSC / MEPC	DSC	FSI	Continuous
Notes: FSI 21: It was suggested that the DSC Sub-Committee review the need for this output which may be covered by amended 12.3.1.1.					
12.3.1.4	Maintain an updated web-based inventory of OPRC/HNS-related information, including R&D projects and best practices	MEPC			Continuous
Notes: To be included in 2014-2015 biennium..					
12.4.1.1	Guidelines and MEPC circulars	MEPC			Continuous

MARINE ENVIRONMENT PROTECTION COMMITTEE (MEPC)					
PLANNED OUTPUTS 2012-2013 WITH STATUS NOTES		Parent organ(s)	Coordinating organ(s)	Associated organ(s)	Target completion year
Number	Description				
13.0.2.1	Guidance for the Secretariat on the development of GISIS and on access to information	MEPC	FSI		Continuous
13.0.2.2	Databases as part of GISIS and other means, including electronic ones	MSC / MEPC / FAL / LEG	Secretariat		Continuous
Notes: FSI 21: Duplication. To be deleted and keep only output 4.0.2.1.					
13.0.3.1	Improved and new technologies approved for ballast water management systems and reduction of atmospheric pollution	MEPC	BLG		Annual
Notes: To be included in 20-14-2015 biennium.					

**ACCEPTED POST-BIENNIAL OUTPUTS PROPOSED FOR INCLUSION IN THE HIGH-LEVEL ACTION PLAN OF THE ORGANIZATION
AND PRIORITIES FOR THE 2014-2015 BIENNIUM FOR THE MARINE ENVIRONMENT PROTECTION COMMITTEE²**

MARINE ENVIRONMENT PROTECTION COMMITTEE (MEPC)								
ACCEPTED POST-BIENNIAL OUTPUTS				Parent organ(s)	Coordinating organs(s)	Associated organ(s)	Timescale (sessions)	References
Number	Biennium (when the output was placed on the post-biennial agenda)	Reference to High-level Actions	Description					
1	2012-2013	7.1.2	Production of a manual entitled "Ballast Water Management – How to do it"	MEPC	BLG		3	
2	2012-2013	7.2.2	Safety aspects of alternative tanker designs assessed	MSC / MEPC	BLG		2	BLG 3/18, paragraph 15.7, work on this output is to be carried out when a proposal for an alternative tanker design is submitted to the Organization. BLG 17: To be deleted
3	2012-2013	7.2.2	Environmental aspects of alternative tanker designs	MEPC	BLG		2	BLG 3/18, paragraph 15.7
4	2012-2013	7.1.2	Revision of Section II of the Manual on Oil Pollution –	MEPC			2	MEPC 65/22, paragraph 8.4.8

² Outputs to be included in the 2014-2015 biennial agenda and proposed target completion years.

MARINE ENVIRONMENT PROTECTION COMMITTEE (MEPC)								
ACCEPTED POST-BIENNIAL OUTPUTS				Parent organ(s)	Coordinating organs(s)	Associated organ(s)	Timescale (sessions)	References
Number	Biennium (when the output was placed on the post-biennial agenda)	Reference to High-level Actions	Description					
			Contingency Planning					
5	2012-2013	7.2.3	Review and update of the OPRC Model training courses	MEPC			4	MEPC 62/24, paragraph 8.3.6

ANNEX 47**ITEMS TO BE INCLUDED IN THE AGENDAS
OF MEPC 66, MEPC 67 AND MEPC 68**

No.	Item	MEPC 66 March-April 2014	MEPC 67 October 2014	MEPC 68 [May] 2015
1	Harmful aquatic organisms in ballast water	RG X	[RG] X	[RG] X
2	Recycling of ships	WG X	[WG] X	X
3	Air pollution and energy efficiency	WG X	WG X	[WG] X
3.1	Further technical and operational measures for enhancing the energy efficiency of international shipping	WG X	[WG] X	[WG] X
4	Reduction of GHG emissions from ships	X	[WG] X	[WG] X
5	Consideration and adoption of amendments to mandatory instruments	DG X	DG X	[DG] X
6	Interpretations of, and amendments to, MARPOL and related instruments	X	RG X	X
7	Implementation of the OPRC Convention and the OPRC-HNS Protocol and relevant Conference resolutions	X	X	X
8	Identification and protection of Special Areas and PSSAs	X	X	X
9	Inadequacy of reception facilities	X	X	X
10	Reports of sub-committees	X	X	X
11	Work of other bodies	X	X	X
12	Harmful anti-fouling systems for ships	X	X	X

No.	Item	MEPC 66 March-April 2014	MEPC 67 October 2014	MEPC 68 [May] 2015
13	Promotion of implementation and enforcement of MARPOL and related instruments	X	X	X
14	Technical Co-operation Sub-programme for the Protection of the Marine Environment	X	X	X
15	Role of the human element	X		
16	Noise from commercial shipping and its adverse impacts on marine life	X	[X]	[X]
17	Work programme of the Committee and subsidiary bodies	X	X	X
18	Application of the Committees' Guidelines	X	X	X
19	Election of the Chairman and Vice-Chairman		X	X
20	Any other business	X	X	X

ANNEX 48

RESOLUTION MEPC.241(65)

Adopted on 17 May 2013

**APPRECIATION OF THE SERVICES TO THE MARINE ENVIRONMENT PROTECTION
COMMITTEE BY MR. ANDREAS CHRYSOSTOMOU**

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

WISHING to record with deep appreciation the outstanding contribution made by Mr. A. Chrysostomou of Cyprus to the work of the Committee during his ten-year Chairmanship from 2003 to 2013,

1. PUTS ON RECORD its deep gratitude and sincere appreciation to Mr. A. Chrysostomou for his commitment, dedication, enthusiasm and contribution to successfully furthering the overall purposes of the Committee in its efforts to prevent and control of marine pollution from ships; and
 2. EXPRESSES its best wishes to his endeavours in the future.
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