



MARINE ENVIRONMENT PROTECTION  
COMMITTEE  
60th session  
Agenda item 22

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**DRAFT REPORT OF THE MARINE ENVIRONMENT PROTECTION COMMITTEE  
ON ITS SIXTIETH SESSION**

**1 INTRODUCTION**

1.1 The sixtieth session of the Marine Environment Protection Committee was held at IMO Headquarters from 22 to 26 March 2010 under the chairmanship of Mr. A. Chrysostomou (Cyprus). The Vice-Chairman of the Committee, Mr. Manuel Nogueira (Spain), was also present.

1.2 The session was attended by delegations from the following Members of IMO:

ALGERIA	CYPRUS
ANGOLA	DEMOCRATIC PEOPLE'S
ANTIGUA AND BARBUDA	REPUBLIC OF KOREA
ARGENTINA	DENMARK
AUSTRALIA	ECUADOR
BAHAMAS	EGYPT
BAHRAIN	ESTONIA
BANGLADESH	FINLAND
BARBADOS	FRANCE
BELGIUM	GERMANY
BELIZE	GHANA
BOLIVIA (PLURINATIONAL	GREECE
STATE OF)	INDIA
BRAZIL	INDONESIA
BULGARIA	IRAN (ISLAMIC REPUBLIC OF)
CANADA	IRELAND
CHILE	ISRAEL
CHINA	ITALY
COLOMBIA	JAMAICA
COOK ISLANDS	JAPAN
COSTA RICA	KENYA
CÔTE D'IVOIRE	LATVIA
CROATIA	LIBERIA
CUBA	LIBYAN ARAB JAMAHIRIYA

LITHUANIA	SAINT KITTS AND NEVIS
LUXEMBOURG	SAN MARINO
MADAGASCAR	SAUDI ARABIA
MALAYSIA	SENEGAL
MALTA	SINGAPORE
MARSHALL ISLANDS	SLOVENIA
MEXICO	SOUTH AFRICA
MONACO	SPAIN
MOROCCO	SRI LANKA
NETHERLANDS	SWEDEN
NEW ZEALAND	SYRIAN ARAB REPUBLIC
NIGERIA	THAILAND
NORWAY	TONGA
OMAN	TRINIDAD AND TOBAGO
PANAMA	TUNISIA
PAPUA NEW GUINEA	TURKEY
PERU	TUVALU
PHILIPPINES	UKRAINE
POLAND	UNITED KINGDOM
PORTUGAL	UNITED STATES
QATAR	URUGUAY
REPUBLIC OF KOREA	VANUATU
ROMANIA	VENEZUELA (BOLIVARIAN
RUSSIAN FEDERATION	REPUBLIC OF)

the following Associate Member of IMO:

HONG KONG, CHINA

by representatives from the following UN Programmes, UN Specialized Agencies and other UN Entities:

INTERNATIONAL ATOMIC ENERGY AGENCY (IAEA)  
UNITED NATIONS ENVIRONMENT PROGRAMME (UNEP)  
INTERNATIONAL LABOUR ORGANIZATION (ILO)  
FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS (FAO)  
UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE  
(UNFCCC)  
THE REGIONAL MARINE POLLUTION EMERGENCY RESPONSE CENTRE FOR  
THE MEDITERRANEAN SEA (REMPEC)

by observers from the following intergovernmental organizations:

EUROPEAN COMMISSION (EC)  
MARITIME ORGANIZATION FOR WEST AND CENTRAL AFRICA (MOWCA)  
REGIONAL ORGANIZATION FOR THE PROTECTION OF THE MARINE  
ENVIRONMENT (ROPME)  
COMMISSION ON THE PROTECTION OF THE BLACK SEA AGAINST  
POLLUTION (BSC)

and by observers from the following non-governmental organizations in consultative status:

INTERNATIONAL CHAMBER OF SHIPPING (ICS)  
INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO)

INTERNATIONAL SHIPPING FEDERATION (ISF)  
 INTERNATIONAL UNION OF MARINE INSURANCE (IUMI)  
 INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS (IAPH)  
 BIMCO  
 INTERNATIONAL ASSOCIATION OF CLASSIFICATION SOCIETIES (IACS)  
 EUROPEAN CHEMICAL INDUSTRY COUNCIL (CEFIC)  
 OIL COMPANIES INTERNATIONAL MARINE FORUM (OCIMF)  
 INTERNATIONAL MARITIME PILOTS' ASSOCIATION (IMPA)  
 FRIENDS OF THE EARTH INTERNATIONAL (FOEI)  
 INTERNATIONAL COUNCIL OF MARINE INDUSTRY ASSOCIATIONS (ICOMIA)  
 INTERNATIONAL FEDERATION OF SHIPMASTERS' ASSOCIATIONS (IFSMA)  
 COMMUNITY OF EUROPEAN SHIPYARDS' ASSOCIATIONS (CESA)  
 INTERNATIONAL ASSOCIATION OF INDEPENDENT TANKER OWNERS  
 (INTERTANKO)  
 THE INTERNATIONAL TANKER OWNERS POLLUTION FEDERATION LIMITED  
 (ITOPF)  
 THE INTERNATIONAL UNION FOR CONSERVATION OF NATURE (IUCN)  
 ADVISORY COMMITTEE ON PROTECTION OF THE SEA (ACOPS)  
 SOCIETY OF INTERNATIONAL GAS TANKER AND TERMINAL OPERATORS  
 LIMITED (SIGTTO)  
 GREENPEACE INTERNATIONAL  
 CRUISE LINES INTERNATIONAL ASSOCIATION (CLIA)  
 INTERNATIONAL ASSOCIATION OF DRY CARGO SHIPOWNERS  
 (INTERCARGO)  
 WORLD WIDE FUND FOR NATURE (WWF)  
 ASSOCIATION OF EUROPEAN MANUFACTURERS OF INTERNAL  
 COMBUSTION ENGINES (EUROMOT)  
 INTERNATIONAL PETROLEUM INDUSTRY ENVIRONMENTAL CONSERVATION  
 ASSOCIATION (IPIECA)  
 THE INSTITUTE OF MARINE ENGINEERING, SCIENCE AND TECHNOLOGY  
 (IMarEST)  
 INTERNATIONAL SHIP MANAGERS' ASSOCIATION (INTERMANAGER)  
 INTERNATIONAL PARCEL TANKERS ASSOCIATION (IPTA)  
 INTERNATIONAL SAILING FEDERATION (ISAF)  
 THE INTERNATIONAL MARINE CONTRACTORS ASSOCIATION (IMCA)  
 INTERNATIONAL OCEAN INSTITUTE (IOI)  
 WORLD NUCLEAR TRANSPORT INSTITUTE (WNTI)  
 INTERNATIONAL HARBOUR MASTERS' ASSOCIATION (IHMA)  
 THE ROYAL INSTITUTION OF NAVAL ARCHITECTS (RINA)  
 INTERFERRY  
 INTERNATIONAL BUNKER INDUSTRY ASSOCIATION (IBIA)  
 INTERNATIONAL ASSOCIATION OF MARITIME UNIVERSITIES (IAMU)  
 INTERNATIONAL TRANSPORT WORKERS' FEDERATION (ITF)  
 INTERNATIONAL PAINT AND PRINTING INK COUNCIL (IPPIC)  
 INTERNATIONAL FUND FOR ANIMAL WELFARE (IFAW)  
 NACE INTERNATIONAL  
 WORLD SHIPPING COUNCIL (WSC)  
 THE NAUTICAL INSTITUTE (NI)

1.3 The Chairman of the Technical Co-operation Committee (TCC),  
 R. Adm. Giancarlo Olimbo (Italy); the Chairman of the Sub-Committee on Bulk Liquids and  
 Gases (BLG), Mr. Sveinung Oftedal (Norway) and the Chairman of the Sub-Committee on

Dangerous Goods, Solid Cargoes and Containers (DSC), Mme Olga Pestel Lefèvre (France) were also present.

### **The Secretary-General's opening address**

1.4 The Secretary-General welcomed participants and delivered his opening address, which is reproduced, in full, in document MEPC 60/INF.24.

### **Chairman's remarks**

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

### **Recent earthquakes and expression of compassion and condolences**

1.6 The Committee expressed its compassion and condolences to the Governments, families and friends of the victims in the recent earthquakes which had caused loss of life in Chile, Haiti and Turkey.

### **Trans-border pollution damage caused by offshore oil exploration**

1.7 The delegation of Indonesia informed the Committee of the progress made regarding the Marine Electronic Highway in the Straits of Malacca and Singapore with assistance from IMO and, in particular, of the trans-border pollution damage to Indonesia caused by a well blow-out of the Montara offshore oil platform located in the waters of Australia, the action taken by both Australia and Indonesia to combat the pollution, and the consideration to establish a trust fund to compensate such damage. As no international legal instrument addresses trans-border oil pollution damage caused by offshore oil exploration, the delegation urged the Committee to keep this matter in mind for future consideration.

### **Adoption of the agenda**

1.8 The Committee adopted the agenda (MEPC 60/1) and agreed to be guided during the session by the provisional timetable (MEPC 60/1/1, annex 2) 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 60/INF...

## 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 recalled that the "International Convention for the Control and Management of Ships' Ballast Water and Sediments" (BWM Convention) had been open for accession by any State since 31 May 2005 and noted that four more States (Cook Islands, Marshall Islands, Republic of Korea and Sweden) had acceded to the Convention since the last MEPC session, which brought the number of contracting Governments to 22, representing 22.65% of the world's merchant fleet tonnage. The Committee urged the other Member States to ratify the Convention at their earliest possible opportunity.

### REPORTS OF THE TENTH, ELEVENTH AND TWELFTH MEETINGS OF THE GESAMP-BWWG

2.2 The Committee noted that, since the last MEPC session, the GESAMP-BWWG had held three meetings, i.e., the tenth meeting (from 14 to 18 September 2009), the eleventh meeting (from 19 to 24 October 2009) and the twelfth meeting (from 7 to 11 December 2009), at IMO Headquarters, under the chairmanship of Mr. Jan Linders. During the three meetings, the GESAMP-BWWG had reviewed a total of 13 proposals for approval of ballast water management systems that make use of Active Substances submitted by China, Denmark (two proposals), Germany (three proposals), Japan, Norway, the Republic of Korea (four proposals) and South Africa.

2.3 The Committee expressed its appreciation for the efforts made by the members of the GESAMP-BWWG to accomplish this task and to facilitate a timely development of new ballast water technologies.

### Basic Approval

2.4 The Committee, having considered the recommendations contained in annex 6 of the "Report of the tenth meeting of the GESAMP-BWWG" (MEPC 60/2/11), annexes 6, 7 and 8 of the "Report of the eleventh meeting of the GESAMP-BWWG" (MEPC 60/2/12), as well as recommendations contained in annexes 4, 5, 6 and 7 of the "Report of the twelfth meeting of the GESAMP-BWWG" (MEPC 60/2/16), agreed to grant **Basic Approval** to:

- .1 SiCURE™ Ballast Water Management System, proposed by Germany in document MEPC 59/2/11;

- .2 Sunrui Ballast Water Management System, proposed by China in document MEPC 60/2/3;
- .3 DESMI Ocean Guard Ballast Water Management System, proposed by Denmark in document MEPC 60/2/4;
- .4 Blue Ocean Guardian (BOG) Ballast Water Management System, proposed by the Republic of Korea in document MEPC 60/2/5;
- .5 Hyundai Heavy Industries Co., Ltd. (HHI) Ballast Water Management System (HiBallast), proposed by the Republic of Korea in document MEPC 60/2/6;
- .6 Kwang San Co., Ltd. (KS) Ballast Water Management System "En-Ballast", proposed by the Republic of Korea in document MEPC 60/2/7;
- .7 OceanGuard™ Ballast Water Management System, proposed by Norway in document MEPC 60/2/8; and
- .8 Severn Trent DeNora BalPure® Ballast Water Management System, proposed by Germany in document MEPC 60/2/9.

2.5 The Committee then invited the Administrations of China, Denmark, Germany, Norway and the Republic of Korea to take into account all the recommendations made in the aforementioned reports (annex 6 of the tenth report; annexes 6, 7, and 8 of the eleventh report; and annexes 4, 5, 6 and 7 of the twelfth report, respectively) during the further development of the systems.

2.6 Having examined the recommendations contained in annex 4 of the "Report of the eleventh meeting of the GESAMP-BWWG" (MEPC 60/2/12), the Committee did not agree to grant Basic Approval to ATLAS-DANMARK Ballast Water Treatment System, proposed by Denmark in document MEPC 60/2, for the reasons given in annex 4 of the above report.

### **Final Approval**

2.7 The Committee, having considered the recommendations contained in annexes 4 and 7 of the Report of the tenth meeting of the GESAMP-BWWG (MEPC 60/2/11) as well as the recommendations contained in annex 5 of the Report of the eleventh meeting of the GESAMP-BWWG (MEPC 60/2/12), agreed to grant **Final Approval** to:

- .1 GloEn-Patrol<sup>TM</sup> Ballast Water Management System, proposed by the Republic of Korea in document MEPC 59/2/7;
- .2 Resource Ballast Technologies System, proposed by South Africa in document MEPC 59/2/10; and
- .3 JFE Ballast Water Management System (JFE-BWMS), proposed by Japan in document MEPC 60/2/2.

2.8 The Committee then invited the Administrations of Japan, the Republic of Korea and South Africa to verify that all the recommendations made in the aforementioned reports (annexes 4 and 7 of the tenth report and annex 5 of the eleventh report, respectively) are fully addressed prior to the issuance of a Type Approval Certificate.

2.9 Having examined the recommendations contained in annex 5 of the Report of the tenth meeting of the GESAMP-BWWG (MEPC 60/2/11), the Committee did not agree to grant Final Approval to Ecochlor® Ballast Water Management System, proposed by Germany in document MEPC 59/2/9, for the reasons given in annex 5 of the above report.

2.10 In this connection, the delegation of Germany expressed its appreciation for the hard work carried out by the GESAMP-BWWG and recognized the significant effort made by the Group members to cope with the substantial workload between MEPC 59 and this session. Nevertheless, the delegation stated that the proposal for approval of the Ecochlor system was thoroughly reviewed by the German competent authorities and it could not agree with the conclusion of the GESAMP as, in their view, the total residual oxidant (TRO) was not a suitable parameter in this particular situation. Notwithstanding the above, Germany indicated its intention to resubmit the proposal for Final Approval of the Ecochlor Ballast Water Management System.

2.11 In considering document MEPC 60/2/1 containing a proposal by the Republic of Korea for Final Approval of the HHI Ballast Water Management System (EcoBallast), the Committee recalled that, when reviewing the proposal for Basic Approval of the above-mentioned system (MEPC 59/2/4), the GESAMP-BWWG was of the view that the application also fulfilled the requirements of Procedure (G9) for Final Approval and that there was no further need for the Group to review the application for Final Approval. Based on the previous recommendation of the GESAMP-BWWG, the Committee agreed to grant Final Approval to HHI Ballast Water Management System (EcoBallast).

**Length of non-confidential information for Basic or Final Approvals**

2.12 The Committee, having noted that some of the non-confidential information for Basic and Final Approval submitted to it were in excess of 110 pages, which added significantly to its workload, invited Members to limit the length of such information, if possible, to a maximum of 30 pages.

**Future meetings of the GESAMP-BWWG**

2.13 The Committee noted that the next regular meeting of the GESAMP-BWWG, i.e. the thirteenth meeting, had been tentatively scheduled from 24 to 28 May 2010 and invited Members to submit their proposals for approval (application dossiers) and the non-confidential description of their ballast water management systems to MEPC 61, as soon as possible but not later than Thursday, 1 April 2010.

2.14 The Committee further noted that, recognizing the possibility that more than four proposals may be submitted for its review and approval by MEPC 61, the GESAMP-BWWG had expressed its availability to have an additional meeting, to accommodate as many proposals as possible, provided that all the necessary conditions for organizing such a meeting are met.

2.15 In that respect, the Committee reiterated its request to the Administrations to thoroughly evaluate the application dossiers and confirm that they are satisfactory and complete, before submitting their proposals to the Organization in accordance with Procedure (G9).

**Other matters emanating from the GESAMP-BWWG meetings**

2.16 The Committee concurred with the GESAMP-BWWG's proposal that information on Total Residual Oxidants (TRO) or Total Residual Chlorine (TRC) should be provided in the form of mg/L TRO or TRC as Cl<sub>2</sub>, for those systems using or producing oxidants to treat ballast water.

2.17 Having examined the GESAMP-BWWG's recommendations on shifting from paper dossiers to electronic dossiers, the Committee invited Member States to submit, as far as practicable, their application dossiers in electronic form, with a view to facilitating the Group's review process.



2.18 In introducing document MEPC 60/2/15 commenting on the Terms of Reference of the GESAMP-BWWG, the delegation of Germany proposed that, during the review of the applications, the Group should set up meetings (either in person or by teleconference) with the manufacturers/Administrations to clarify any outstanding issue.

2.19 The Chairman of the GESAMP-BWWG stated that any alteration or amendment to the Terms of Reference given to the GESAMP in 2005 should be carefully considered and the implications of such changes should be thoroughly assessed. He informed the Committee that, under the current Methodology, the Group does communicate with the applicants/Administrations to clarify various aspects related to the proposals, this communication being mainly in the form of e-mails due to the time difference between London and the countries of the applicants and due to the need to keep written records of the information provided. He further indicated that formalizing these communications by allocating two hours, as requested in the proposal, for each application would take away one working day and, consequently, limit the output of the Group to no more than three applications per meeting. The Chairman of the GESAMP-BWWG explained that the Group remains prepared to communicate with applicants to seek clarification on technical aspects, but is reluctant to enter into debates with regard to the recommendations made to the Committee, which could be counterproductive and lead to lengthy arguments. The Chairman of the GESAMP-BWWG concluded that the Group is willing to thoroughly consider the proposals by Germany and all the possible consequences and report back to MEPC 61.

2.20 Having noted that several delegations supported, in principle, the proposal of Germany to allocate time for discussions between the GESAMP-BWWG and the applicants/Administrations on a trial basis whilst some other delegations were of the view that the current process is sufficiently clear and communication between the two parties is already taking place, the Committee agreed to request the GESAMP-BWWG to conduct, on a trial basis, discussions with the applicants, at their request and for Final Approval proposals only, and report to MEPC 61 on their findings and on the lessons learned.

2.21 The delegation of Japan drew the attention of the Committee to the considerable workload of the GESAMP-BWWG and requested that any additional burden that could hamper the work of the Group be kept to the minimum.

**SECOND STOCKTAKING WORKSHOP ON THE ACTIVITY OF THE GESAMP-BALLAST WATER WORKING GROUP**

2.22 Having recalled that MEPC 59 had agreed with the recommendation to hold a second workshop to continue the development of adequate “tools” to increase the effectiveness and efficiency of the GESAMP-BWWG in order to accommodate the significant increase in the workload, the Committee noted that the Second Stocktaking Workshop on the Activity of the GESAMP-Ballast Water Working Group was held at IMO Headquarters, in London, from 26 to 28 October 2009, under the chairmanship of Mr. Jan Linders.

2.23 In considering the report of the Workshop (MEPC 60/2/13), the Committee noted that the Workshop had made further progress with regard to human exposure scenarios, environmental risk assessment models for ballast water discharge and the database for chemical by-products formed during the ballast water treatment. The Committee also noted that an additional workshop will be needed, possibly in the second half of year 2010, to complete the work and agreed to consider the updated version of Methodology for information gathering and the conduct of work of the GESAMP-BWWG, including the above-mentioned new “tools” at MEPC 62 with a view to its approval and dissemination as a new BWM technical circular.

**MEPC RESOLUTION REGARDING THE INSTALLATION OF BALLAST WATER MANAGEMENT SYSTEMS ON NEW SHIPS TO MEET WITH THE APPLICATION DATES CONTAINED IN THE BWM CONVENTION**

2.24 The Committee recalled that MEPC 59 had concluded that there were sufficient type-approved ballast water treatment technologies available for ships, subject to regulation B-3.3, constructed in 2010 and had instructed the Secretariat to prepare a draft MEPC resolution for consideration and adoption at this session, requesting Administrations to encourage the installation of ballast water management systems on new ships in accordance with the application dates contained in the BWM Convention.

2.25 The delegations of Spain, South Africa and IUCN expressed their support for the resolution and suggested to further increase the important role played by GloBallast in the dissemination of information on ballast water management. IUCN referred, in particular, to the successful series of events organized by GloBallast in co-operation with World Maritime University and the North Sea Ballast Water Project and recommended to follow up this initiative, which proved to be beneficial for all parties involved.

2.26 Having indicated their interest in the timely ratification of the Ballast Water Management Convention, the delegations of the Bahamas and Singapore reiterated their

concern regarding the lack of certainty with respect to the sampling procedures, which was perceived as the main reason for postponing the ratification of the instrument.

2.27 The Committee noted the information provided by the observer of the European Commission with regard to the current initiative of the European Maritime Safety Agency (EMSA) to develop a draft for the much needed guidance document on sampling and analysis protocols and the urgent request by BLG 14 for technical contribution on this matter from Member States, which could be considered by the Ballast Water Review Group at MEPC 61 to facilitate the completion of such a document at BLG 15.

2.28 The Committee also noted the information provided by the delegation of Brazil on the recent approval of the BWM Convention by the Brazilian Parliament and that the instruments of ratification would be deposited with the Secretary-General of the Organization in the near future.

2.29 Following the consideration of the draft text of the MEPC resolution on installation of the ballast water management systems on new ships (MEPC 60/2/10) and having noted the concerns expressed, the Committee agreed to amend operative paragraph 1 of the resolution to read:

**"CALLS ON STATES** which have not yet ratified, accepted, approved or acceded to the BWM Convention to do so at their earliest convenience;"

and adopted the resolution as set out in annex ...

#### **OTHER INFORMATION RELATED TO BALLAST WATER MANAGEMENT AND CONTROL**

2.30 The Committee noted with appreciation the information contained in the following documents:

- .1 MEPC 60/2/14 (India) on the update of Self-validating e-Ballast Water Reporting Form;
- .2 MEPC 60/INF.2 (ROPME/MEMAC) on implementation of ballast water exchange area outside the ROPME Special Area;
- .3 MEPC 60/INF.11 (India) on the implementation of the Ballast Water Management Programme in India (BAMPI);

- .4 MEPC 60/INF.14 (Republic of Korea) on the type approval of the NK-O3 BlueBallast System (Ozone) (a Type Approval Certificate was issued on 24 November 2009);
- .5 MEPC 60/INF.15 (Norway) on the outbreak of *Salmonella* in cattle possibly due to infection through ballast water;
- .6 MEPC 60/INF.16 (Turkey) on ballast water management implementation in Turkey, including ballast water exchange requirements for ships entering ports in eastern Mediterranean Sea; and
- .7 MEPC 60/INF.16 (United Kingdom) on the second update of the Lloyd's Register Industry Guide on ballast water management systems.

2.31 At the request of the observer from ROPME, a statement regarding the ballast water management measures implemented in ROPME Sea Area is set out in annex ...

2.32 In response to a request for clarification regarding document MEPC 60/INF.2, the observer from ROPME stated that, paragraph 2 on the first page of the annex to document MEPC 60/INF.2 should be interpreted in accordance with the provision contained in regulation B-4, paragraph 1, of the Ballast Water Management Convention. Furthermore, the observer from ROPME clarified that all ships are expected to exchange ballast water outside the ROPME Sea Area and indicated that a description of the ROPME Sea Area, including the map, have been provided in document MEPC 59/INF.3 (ROPME-MEMAC).

### **3 RECYCLING OF SHIPS**

3.1 The Committee noted that the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009 (the Hong Kong Convention) had been open for signature from 1 September 2009 until 31 August 2010. So far, only France has signed the Convention subject to ratification. The Committee encouraged more countries to sign the Convention in the remaining time.

3.2 The Committee recalled that, since the adoption of the Hong Kong Convention, MEPC 59 had adopted the "Guidelines for the development of the Inventory of Hazardous Materials" and had also established a correspondence group to continue the development of the "guidelines for safe and environmentally sound ship recycling".

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**GENERAL STATEMENTS**

3.3 The delegation of Bangladesh informed the Committee of a technical cooperation programme on sustainable ship recycling in accordance with the Hong Kong Convention that had been established between Norway and Bangladesh, in cooperation with the IMO Secretariat. The objective of the programme was to provide assistance and capacity-building to fulfil requirements for safe and environmentally sound ship recycling in accordance with the Convention and with a view to its ratification. The establishment of the programme was a result of a successful workshop held in February 2010 at Chittagong in Bangladesh. One of the elements in the proposal was training for employers and employees. Other Member States or Organizations wishing to contribute to the planned activity were invited to contact Bangladesh or Norway.

3.4 The delegation of Thailand informed the Committee that it had offered to host a regional workshop on the early implementation of the standards of the Hong Kong Convention, from 25 to 27 May 2010 in Pattaya, in line with resolution 5 as adopted by the Diplomatic Conference held in May 2009. The purpose of the workshop was to sensitize the ship recycling industry, the shipowning industry and IMO Member States, to consider applying the technical standards of the Convention on a voluntary basis to ships and to ship recycling facilities under their jurisdiction, prior to the Convention's entry into force and as soon as operationally feasible.

3.5 The delegation of Turkey stated that, having accepted a proposal by the Secretariat, it had hosted a successful national workshop on ship recycling in Aliaga, Izmir, from 23 to 24 October 2009, with the support of the central Government and the participation of Government officials, for local, regional and central authorities, international experts, and also the Turkish ship recycling industry which assisted in the organization and hosting of the workshop. On the first day of the workshop the participants visited the ship recycling facilities at Aliaga and were introduced to the practices of ship recycling in Turkey, to market information, to the historical evolution of the industry, to the system adopted for the environmentally sound management of hazardous materials, to the documentation requirements, and to the system for Government overview. On the second day, a number of experts discussed a range of topics relating to the Hong Kong Convention and its guidelines, and also covering issues specific to the recycling practices and to the ratification process in Turkey.

**PLANNING OF THE WORK**

3.6 The Committee noted that ten documents had been submitted under the item and agreed to plan its work as follows:

- .1 under the heading "Development of the guidelines", to consider eight documents addressing the development of the guidelines for safe and environmentally sound ship recycling; and
- .2 under the heading "Other matters", to consider two documents concerning guidance for the recycling of flagless and non-Party ships, and threshold levels for radioactive substances in relation to the Guidelines for the development of the Inventory of Hazardous Materials.

**DEVELOPMENT OF THE GUIDELINES**

3.7 The Committee thanked Japan for its continuing contribution as coordinator of the correspondence group and for its excellent work. The Committee agreed that, in their further development, the facility guidelines needed to be more user-friendly, brief and clear. The Committee also confirmed that the guidelines should not go beyond the requirements of the Hong Kong Convention and, in this respect, agreed to the usefulness of cross-referencing the text of the guidelines to the relevant regulations of the Convention. Finally, the Committee agreed to a proposal by Norway (MEPC 60/3/8) for the parallel development of the three guidelines (on facilities, on the Ship Recycling Plan, and on the authorization of Ship Recycling Facilities) in order to provide for a better understanding of the interrelationships between them.

3.8 The Committee agreed to instruct the working group on guidelines for ship recycling to consider the report of the intersessional correspondence group (document MEPC 60/3 by Japan) as the basis for the further development of the "guidelines for safe and environmentally sound ship recycling", taking into account the discussion at the plenary.

3.9 The Committee also instructed the working group to commence work on the "Guidelines for the development of the Ship Recycling Plan", and to develop a work plan with an appropriate timetable for the development of the guidelines associated with the Hong Kong Convention, taking into account the relevant comments made by Norway in document MEPC 60/3/8.

3.10 The delegation of Turkey informed the Committee that Turkey, together with France and Germany, had started working on a draft text for the guidelines for the authorization of Ship Recycling Facilities, utilizing an earlier draft by Norway. This collaborative effort was intended to assist the work of the Committee by providing MEPC 61 with a basic text for the development of the authorization guidelines.

## **OTHER MATTERS**

### **Guidance for the recycling of flagless and non-Party ships**

3.11 Regarding document MEPC 60/3/3 (Marshall Islands), referring to the need to develop guidance concerning the recycling of flagless and non-Party ships, the Committee agreed to request the working group to consider this document and propose an appropriate course of action. In this respect the delegation of India urged the Committee to take into account a serious incident that took place at the beginning of 2010, when a passenger ship, subsequently found to contain large quantities of hazardous wastes, arrived for recycling at Alang in the Gujarat State of India, with all its statutory certificates fraudulent. Furthermore, the authorities of the alleged State of registration confirmed that the ship was not registered by them.

### **Threshold levels for radioactive substances in relation to the guidelines for the development of the Inventory of Hazardous Materials**

3.12 In document MEPC 60/3/2, the International Atomic Energy Agency noted that the guidelines for the development of the Inventory of Hazardous Materials, which were adopted by resolution MEPC.179(59), specify "no threshold level" for radioactive substances. However, small amounts of radioactive substances could be exempt from the need for regulatory control, on the basis of criteria and exemption procedures developed and published by IAEA. The Committee noted that the proposal was to add the following footnote to Appendix 1 of the Guidelines when these are published together with the Convention as an IMO publication:

"However, note that, in order to identify amounts of radioactive substances which could be exempted from the need for regulatory control, "exemption criteria" were established in the IAEA Safety Standards (Safety Series No.115, International Basic Safety Standards for the Protection against Ionizing Radiation and for the Safety of Radiation Sources, Schedule I, p. 81-89; Vienna, 1996. IAEA is currently in the process of updating IAEA Safety Series No.115). For practical purposes, the IAEA defined values (e.g., "exemption levels") that could be considered as "thresholds"

below which the substances could be automatically exempted from any control without further consideration. National Regulatory Authorities normally establish exemption levels for radioactive sources and other radioactive materials."

3.13 The Committee agreed to request the working group to consider this proposal and to suggest an appropriate course of action.

#### **ESTABLISHMENT OF THE WORKING GROUP ON GUIDELINES FOR SHIP RECYCLING**

3.14 The Committee agreed to establish the working group on guidelines for ship recycling under the chairmanship of Mrs. Kristin Elise Frogg (Norway) with the following Terms of Reference:

"Using the report of the correspondence group on ship recycling guidelines (document MEPC 60/3 by Japan) as basis, as well as comments, proposals and decisions made in plenary, the working group on guidelines for ship recycling was instructed to:

- .1 further develop the "guidelines for safe and environmentally sound ship recycling", taking into account the comments and proposals in documents MEPC 60/3/4 (Japan), MEPC 60/3/5 (Japan), MEPC 60/3/6 (Denmark), MEPC 60/3/8 (Norway), MEPC 60/3/1 (IAEA) and MEPC 60/3/7 (IACS);
- .2 commence the development of the "guidelines for the development of the Ship Recycling Plan", taking into account document MEPC 60/3/4 (Japan);
- .3 develop a work plan with an appropriate timetable for the future development of the guidelines associated with the Hong Kong Convention, in line with resolutions 4 and 5 of the 2009 International Conference on the Safe and Environmentally Sound Recycling of Ships, for the approval of the Committee (taking into account the relevant comments made by Norway in document MEPC 60/3/8);
- .4 consider the proposals in documents MEPC 60/3/3 (Marshall Islands) and MEPC 60/3/2 (IAEA) and propose appropriate courses of action;
- .5 develop draft terms of reference for an intersessional correspondence group on ship recycling guidelines; and
- .6 submit a written report to plenary on Thursday, 25 March 2010."



**REPORT OF THE WORKING GROUP ON GUIDELINES FOR SHIP RECYCLING**

[3.15 The Committee considered and approved the report of the working group MEPC 60/WP.8 in general and, in particular (paragraph numbers are those of document MEPC 60/WP.8):

- .1 noted the progress made by the group on the development of the draft guidelines for safe and environmentally sound ship recycling (paragraphs 4 to 12);
- .2 noted that the group had commenced work on the guidelines for the development of the Ship Recycling Plan (paragraphs 13 to 15);
- .3 endorsed the proposed work plan and timetable for the further development of the guidelines associated with the Hong Kong Convention (paragraph 16), which is set out in annex ...;
- .4 noted the outcome of the consideration of the group regarding the development of guidance for the recycling of flagless and non-Party ships by Parties to the Convention (paragraph 17);
- .5 endorsed the addition of a footnote to Appendix 1 of the Guidelines for the Development of the Inventory of Hazardous Materials, as adopted by resolution MEPC.179(59), addressing threshold levels for radiation substances, when these guidelines are published together with the Convention as an IMO publication (paragraphs 18 and 19); and
- .6 agreed to the re-establishment of the intersessional correspondence group on ship recycling guidelines, under the coordination of Japan<sup>1</sup> with the specified draft terms of reference (paragraph 20).

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<sup>1</sup>**Coordinator:**

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3.16 The Committee thanked the Chairman and the members of the Working Group for their hard work that led to the finalization and adoption of the inventory guidelines. The Committee also thanked Japan for the considerable effort expended in the preparation of the basis documents for both inventory and the facilities guidelines.]

#### **4 PREVENTION OF AIR POLLUTION FROM SHIPS**

4.1 The Committee noted that this agenda item concerned two major issues: prevention of air pollution from ships in general and in particular MARPOL Annex VI-related issues; and control of greenhouse gas emissions from ships engaged in international transport. The Committee agreed to first consider MARPOL Annex VI-related issues, and then greenhouse gas emissions from ships.

##### **Air pollution issues and matters related to MARPOL Annex VI**

4.2 The Committee recalled that MEPC 58 had unanimously adopted the revised MARPOL Annex VI, by resolution MEPC.176(58), and the NO<sub>x</sub> Technical Code 2008, by resolution MEPC.177(58), and following the termination of the acceptance period on 1 January 2010 it was noted that they will enter into force as expected on 1 July 2010.

##### ***Equivalents***

4.3 The Committee agreed that documents MEPC 60/4/19 by IMarEST, proposing amendments to the 2009 Guidelines for exhaust gas cleaning systems, and MEPC 60/4/25 by Norway, providing proposals to ensure robust and uniform application of regulation 4 of the revised MARPOL Annex VI, be deferred to MEPC 61 for debate. Interested delegations were invited to make further submissions to the next session.

##### ***Specification of marine fuels***

4.4 The Committee noted the submission by ISO, MEPC 60/4/42, providing the status for the revision of ISO: 8217 "Specification of Marine Fuels", indicating that the FDIS (Final Draft International Standard) version was confidently expected to be published prior to 1 July 2010. As indicated in paragraph 8 of the document, at the time of submission it was not possible for ISO to advise the Committee on the content and details of the FDIS version of ISO 8217.

4.5 The Committee welcomed the information that the Secretariat had received the newly released FDIS version, and that it would be issued as an MEPC 61 document enabling interested delegations to provide comments in writing. The Committee also welcomed the

information provided orally by the ISO observer delegation that, by MEPC 61, the standard would have been published in its final form. The Committee agreed to consider the matter in detail at the next session and invited interested Members to submit further input.

### ***Ozone-depleting substances and coordination with UNEP***

4.6 The Committee considered document MECP 60/4/27 (Secretariat) providing information about a possible uncertainty in the shipping industry related to correct procedures when purchasing certain refrigerant gases for shipboard use. This uncertainty could possibly result in problems for ships in need of purchasing such gases in foreign ports, and a potential gap in data collection and reporting of import/export of ozone-depleting substances. The note also stated that UNEP's Ozone Secretariat intended to bring the matter to the attention of its Parties at a meeting in June 2010.

4.7 The Committee agreed that further information on procedures for purchasing of HCFCs in foreign (European) ports could be useful for maritime Administrations and the shipping industry, and that such information may be conveyed in the form of an MEPC Circular. Moreover, the Committee requested the Secretariat to continue liaising with the Ozone Secretariat and to prepare a draft MEPC circular for consideration at its next session.

### ***IAPP Certificate – revised MARPOL Annex VI***

4.8 In relation to the entering into force of the revised MARPOL Annex VI on 1 July 2010, the Committee considered document MEPC 60/4/32 by IACS claiming a need for greater clarity in instances when it was necessary to re-issue the IAPP Certificates and its Supplements, after the entry into force of the amendments. The Committee agreed that the matter should be further considered by the working group and agreed to instruct it accordingly.

### ***Technical information to facilitate the development of VOC Management Plans***

4.9 The Committee recalled that MEPC 59 agreed that additional technical information on vapour pressure control systems and their operation would assist the shipping industry in development of Volatile Organic Compounds (VOC) management plans as requested for all tankers carrying crude oil in the revised MARPOL Annex VI. On this basis, MEPC 59 had agreed to the technical information on systems and operation to assist development of VOC management plans for tankers carrying crude oil, as set out in the annex to MEPC.1/Circ.680.

4.10 The Committee considered the technical information to facilitate the development of VOC management plans, contained in document MEPC 60/4/38 by Norway, and agreed that

the working group should consider it further, in particular, whether or not the information was relevant and of the same nature as the technical information in MEPC.1/Circ.680, and if so, the group should develop a draft separate circular with the necessary references to MEPC.1/Circ.680 for the Committee's consideration.

### **Control of greenhouse gas emissions from international shipping**

#### ***Outcome of COP 15***

4.11 The Committee recalled that it had made significant progress at its last session on all three building blocks in the Organization's GHG work; on technical and operational reduction measures, and on possible market-based instruments. Following thorough considerations and meticulous work, in particular by the working group, the Committee had produced a set of robust and efficient measures to improve fuel efficiency in ships and four MEPC circulars on technical and operational measures were agreed for circulation. Having held an in-depth debate where all aspects were carefully deliberated; a work plan for further consideration of the market-based measures, culminating in 2011, had also been agreed.

4.12 The Committee recalled also that MEPC 59 had noted that 2009 was a crucial year in the international climate change negotiations, culminating by the Climate Change Conference (COP 15/CMP 5) in Copenhagen, Denmark, in December. COP 15 had been expected to adopt a new post-2012 treaty to combat climate change, to be agreed upon by the 192 Parties to the UNFCCC. Taking into account the views of the UNFCCC Parties, and partly based on information submitted by ICAO and IMO, COP 15 had also been expected to consider how GHG emissions from international civil aviation and maritime transport should be regulated in the post-2012 regime to combat climate change.

4.13 The Committee further recalled that it had requested the Secretariat to continue its cooperation with the UNFCCC Secretariat, by attending relevant UNFCCC meetings and reporting the outcome of IMO's work to relevant UNFCCC meetings and in particular to COP 15/CMP 5. It had also requested the Secretariat to continue reporting on progress and developments within UNFCCC related to emissions from international maritime transport and the work of the Committee.

#### ***Information on the UNFCCC process***

4.14 The Committee welcomed and noted the information provided in the submissions containing the Secretariat's report on the activities leading up to and at the Copenhagen

Conference and the outcome thereof (documents MEPC 60/4/9, MEPC 60/4/9/Add.1 and MEPC 60/INF.9). The Committee noted in particular that:

The IMO Secretariat had participated in relevant preparatory meetings, and had submitted three documents to the Copenhagen Conference, which may be found annexed to document MEPC 60/INF.9:

- .1 a position note – outlining IMO's objectives for the Conference;
- .2 an information note – providing a more in-depth description of IMO's GHG work, including descriptions of the technical and operational measures; summaries of the market-based measures under consideration; and information on IMO's role in the regulation of international shipping in general; and
- .3 the Executive Summary of the Second IMO GHG Study 2009.

The Secretary-General headed IMO's delegation attending the Conference. In addition to taking part in plenary sessions and delivering the Organization's statements, the Secretary-General held meetings with Ministers, Ambassadors and other Government officials, as well as representatives of other United Nations Agencies and Programmes, and with delegates representing civil society. He also took part in the UN High-level Event hosted by the UN Secretary-General.

Extensive distribution of a wide variety of outreach and information material on relevant IMO matters took place throughout 2009 and, in particular, in Copenhagen where IMO had an Exhibition stand, and also at side-events, where the IMO representatives participated and presented IMO's work on control of GHG emissions from international shipping.

The outcome of the Conference, directly relevant to the Committee's work, was that the mandate of the *Ad Hoc* Working Group on Long Term Cooperative Action under the Convention (AWG-LCA) had been extended and that the group will continue its work drawing on its initial report to COP 15 and also from the progress made during the Conference.

At the opening of the Conference, AWG-LCA had before it seven options to control emissions from international shipping, which were considered through informal consultations by two appointed co-facilitators from Canada and Venezuela. Later,

the Presidency also tasked the Environmental Ministers of Singapore and Norway to undertake consultations at political level. Both consultation tracks were fruitful but did not lead to a single agreed text without square brackets, and the LCA report, therefore, only contains a placeholder for policy approaches and measures to limit and reduce greenhouse gas emissions from international civil aviation and international maritime transport.

The text prepared by the co-facilitators, presented in paragraph 10 of MEPC 60/4/9/Add.1, was not an agreed text but was reproduced to be available to Parties in the continued efforts of the AWG-LCA. The text indicated that there was no disagreement among the world community that IMO was the appropriate international body to develop and enact regulations for international shipping.

The ongoing UNFCCC negotiations was a Party driven process, where the Secretariat, as an United Nations observer organization, had limited access to the negotiations and could only provide information if requested to do so.

4.15 In connection with production of outreach material and IMO's attendance in Copenhagen, the Committee thanked the following for their generosity and valuable assistance:

the Government of Denmark for being a generous host, the Danish Maritime Administration for assisting the Secretary-General and the Secretariat in all possible ways, including logistics and printing of documents;

the Government of Norway for their generous donations covering the production of a wide range of outreach material and activities, and also covering a substantial part of the expenses of the Secretariat's attendance;

the Government of the Netherlands for a donation towards the production of the World Maritime Day 2009 DVD; CLIMATE CHANGE; A challenge for IMO too!;

the Danish Shipowners Association for hosting an IMO reception where the Danish Minister Ms. Lykke Friis and the Secretary-General gave the key note speeches, and for a donation towards the IMO's office space at the Conference, to which the International Chamber of Shipping also contributed;

the Governments of the Marshall Islands and Cyprus, the Secretariat of ICAO, and ICS, BIMCO and INTERTANKO for co-hosting side events with IMO;

the World Maritime University for their assistance;

the UNFCCC Secretariat, in particular Mr. Florin Vladu, for their tireless work and outstanding cooperation under the very difficult circumstances that prevailed; and all the IMO Members' representatives who kept the Secretariat informed of decisions made behind closed doors.

4.16 The Committee requested the Secretariat to continue its cooperation with the UNFCCC Secretariat, by attending relevant UNFCCC meetings and reporting the outcome of IMO's work to the attention of relevant UNFCCC meetings. It also requested the Secretariat to continue reporting on progress and developments within UNFCCC related to emissions from international maritime transport and the work of the Committee, as appropriate.

4.17 The Committee noted with interest an intervention by the representative of the UNFCCC Secretariat where it was emphasized that in his addresses to the media since the Conference, Mr. Yvo de Boer, the Executive Secretary of UNFCCC, had underlined three key points that the United Nations Climate Change Conference in Copenhagen had produced:

First, the Copenhagen Accord had raised climate change to the highest level of government;

Second, the Accord reflected a political consensus on the long-term, global response to climate change; and

Third, the negotiations brought an almost full set of decisions to implement rapid climate action near completion.

Exchange of views among governments officials since the Conference had shown that most countries see the Copenhagen Accord as a tool that can be used to advance the negotiations. The preparation of a draft decision on emissions from international bunkers was, unfortunately, not possible as the views of Parties continued to be divergent. A draft text was, however, proposed by the facilitators of the informal consultation group on bunkers established by the Chair of the AWG-LCA and has been made available in a document capturing the status of the negotiations in the second week of the Conference (also reproduced in paragraph 10 of document MEPC 60/4/9/Add.1).

Emissions from bunker fuels were not explicitly mentioned in the Copenhagen Accord. The issue was, however, addressed in ministerial consultations during the High Level Segment of the Conference. In general, raising the issue to the highest level of government could improve the involvement of environment and transportation ministers and thus enhance the chances for an agreement.

The Accord spoke about reducing global emissions so as to hold the increase in global temperature below 2 degrees Celsius. It could therefore be important for the IMO and the MEPC to explore what this goal means for international shipping. What would be a fair contribution for the international shipping sector to achieving this long term goal?

He further stated that the issue of bunker fuels was also on the agenda of the next session of the Subsidiary Body for Scientific and Technological Advice (SBSTA). The UNFCCC representative closed by stating that the fact that the Copenhagen Conference did not deliver the full agreement the World needs to address climate change "just makes the task more urgent. And 2010 provides an opportunity for IMO and UNFCCC to further advance their work on **a robust and efficient GHG regime for international shipping** which will benefit the global environment and future generations. To this end, the work of IMO in this respect was essential".

### ***General statements***

4.18 The delegations of: Spain (as the EU Presidency); China; Brazil, Saudi Arabia; South Africa; Norway; Argentina; India; France; The Philippines; Malaysia; Portugal; The United States; Germany; Sweden; Cuba; Cook Islands; Canada and Italy (listed in the order of interventions) gave general statements, which are set out in annex ....

### **Chairman's proposal for further progress**

4.19 The Committee considered the note by the Chairman MEPC 60/4/57 on work arrangements at the session, and noted that almost 100 documents on GHG matters – including information documents and the documents kept in abeyance from MEPC 59 and MEPC 58, were before the Committee and that, in order to fulfil its task despite the heavy workload, it was necessary to structure the discussion in a meaningful way without hindering debate and to secure enough time for a working group to do its part of the work.

4.20 Having examined all relevant submissions, document MEPC 60/4/57 was prepared to facilitate progress on GHG issues at this session and throughout 2010 and contained the chairman's proposals for work arrangements and for possible intersessional work on



GHG matters prior to the sixty-first session. The Committee recalled Rule 35 of its Rules of Procedures on the functions of its Chairman, whereby he shall direct the discussion and ensure observance of the Rules of Procedure, accord the right to speak, put questions to vote and announce decisions resulting from voting.

### ***Order of discussions***

4.21 The Committee agreed to use document MEPC 60/4/57 as its voyage plan at this session, without prejudging the outcome of each discussion, and to debate the matters in the following order:

- .1 technical and operational measures, including instructions to the GHG Working Group;
- .2 market-based instruments, in line with the work plan agreed by MEPC 59 including methodology and criteria for feasibility studies and impacts assessments;
- .3 reduction targets for international maritime shipping; and
- .4 other GHG matters (including black carbon and the Arctic).

### **Technical and operational measures**

4.22 As agreed in principle at MEPC 59, the Committee re-established the Working Group on GHG Issues under the Chairmanship of Mr. Koichi Yoshida (Japan). The Committee also agreed that the working group would consider the following submissions related to technical and operational measures, and should take into account the documents deferred from the last session as listed in paragraphs 6 to 11 in document MEPC 60/4, as appropriate:

MEPC 60/4/1	Finland and Sweden	Clarifications for definitions of ship types and for the use of ice class correction factors $f_j$ and $f_i$ in the calculation of EEDI
MEPC 60/4/2	IACS, CLIA, ICS and INTERFERRY	Draft interim Guidelines for the validation of Electric Power Tables for EEDI
MEPC 60/4/3	INTERTANKO	Energy Efficiency Design Index for Tankers

MEPC 60/4/4	INTERTANKO	Energy Efficiency Design Index for Propulsion Redundancy
MEPC 60/4/5	Japan	Report on the trials on the verification of the Energy Efficiency Design Index (EEDI)
MEPC 60/4/6	Denmark	Consideration of ro-ro cargo ship subgroups in the EEDI for new ships
MEPC 60/4/7	Denmark and Japan	Guidelines for calculation of baselines for use with the Energy Efficiency Design Index
MEPC 60/4/11	EUROMOT	Information on the prospect of energy efficiency improvement for new ships
MEPC 60/4/14	Denmark, the Marshall Islands and WSC	Consideration of the Energy Efficiency Design Index for New Ships  Recalculated baseline for container vessels
MEPC 60/4/15	Greece	Comments on the EEDI Baseline Formula
MEPC 60/4/16	Greece	The Energy Efficiency Design Index (EEDI) and Life Cycle Considerations
MEPC 60/4/17	Greece	The Energy Efficiency Design Index (EEDI) and Underpowered Ships
MEPC 60/4/18	Republic of Korea	EEDI calculation method for LNG carriers with diesel-electric propulsion systems
MEPC 60/4/20	INTERFERRY	Application of Power Correction Factor $f_j$ for Enhanced Safety
MEPC 60/4/21	IPPIC	The importance of using effective anti-fouling coatings in relation to greenhouse gas emissions from shipping
MEPC 60/4/29	China	Comments on the coefficient " $f_w$ " in the EEDI formula
MEPC 60/4/30	China	Considerations of the establishment of EEDI baselines
MEPC 60/4/31	China	Comments on the interim Guidelines on the method of calculation of EEDI and the interim Guidelines for voluntary verification of EEDI

MEPC 60/4/33	IMarEST	Energy Efficiency Design Index Baseline Evaluation for Tankers, Containerships, and LNG Carriers
MEPC 60/4/34	IMarEST	Influence of Design Parameters on the Energy Efficiency Design Index for Tankers, Containerships, and LNG Carriers
MEPC 60/4/35	Japan, Norway and the United States	Mandatory EEDI requirements – Draft text for adding a new part to MARPOL Annex VI for regulation of the energy efficiency for ships
MEPC 60/4/36	Japan	Analysis on the appropriate values of the reduction rates of the required EEDI
MEPC 60/4/44	SIGTTO	Results of data gathering exercise for the assessment of the Energy Efficiency Design Index (EEDI) for ships carrying liquefied gases in bulk
MEPC 60/4/45	ITTC	Proposal for an Energy Efficiency Design Index Verification Process
MEPC 60/4/46	OCIMF and INTERTANKO	Comments on the outcome of the United Nations Climate Change Conference held in Copenhagen, Denmark
MEPC 60/4/47	Austria, Bulgaria, Czech Republic, Estonia, France, Germany, Hungary, Ireland, Latvia, Lithuania, Luxembourg, the Netherlands, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom and the European Commission	Comments on the interim guidelines on the method of calculation of the Energy Efficiency Design Index for new ships based on a study on tests and trials of the EEDI formula
MEPC 60/4/48	INTERFERRY and CESA	Comments related to trial calculations of the EEDI for subgroups of ro-ro cargo ships
MEPC 60/4/52	INTERTANKO	Tanker Energy Efficiency Management Plan (TEEMP)

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MEPC 60/4/56	CLIA	Consideration of the Energy Efficiency Design Index (EEDI) for cruise ships
MEPC 60/INF.6	Finland and Sweden	Impact of the ice-class correction factors $f_i$ and $f_j$ on calculation of EEDI
MEPC 60/INF.18	Secretariat	Assessment of IMO energy efficiency measures for the control of GHG emissions from ships
MEPC 60/WP.6	Secretariat	Communication with IPCC on CO <sub>2</sub> Conversion Factors

4.23 Following a proposal by its Chairman, the Committee agreed that the proposal to add a new part on energy efficiency to MARPOL Annex VI, which was submitted as document MEPC 60/4/35 by Japan, Norway and the United States, should be introduced and thoroughly considered in plenary while all other documents on technical and operational measures should be considered first by the working group.

4.24 The Committee recalled that the Second IMO GHG Study 2009 concluded that a mandatory limit on the Energy Efficiency Design Index for new ships was a cost-effective solution that could provide an incentive to improve the design efficiency of new ships. The Committee had also considered at earlier sessions what instrument would be the most suitable to enact the different measures in the comprehensive framework that would be needed to improve energy efficiency and reduce emissions in the global maritime sector to meet the expectations from science (IPCC Fourth Assessment Report – 2007) and the two degrees target endorsed by the Copenhagen Accord.

4.25 The Committee recalled also that the Committee had considered the mandatory application of the EEDI as part of the debate on technical and operational measures for more than a decade and more recently, since Denmark submitted the proposal leading to the current EEDI framework and formula to MEPC 57 in document MEPC 57/4/3. Denmark had followed this up by suggesting MARPOL Annex VI to be the suitable instrument for such regulations in document GHG-WG 1/2/1. A large number of submissions to the last three sessions of the Committee, as well as to the intersessional meetings, had advocated, or implied, that the technical and operational measures needed to be mandatory to have any real effect, and of those, eight had specifically pointed to MARPOL Annex VI as the proper IMO instrument.

4.26 The Committee considered document MEPC 60/4/35 by Japan, Norway and the United States, containing a framework for mandatory application of the EEDI for new ships and the SEEMP for all ships in operation, as well as draft text in its annex, with a proposal to add a new part to MARPOL Annex VI for the regulation of energy efficiency for ships. The delegation of Japan, when introducing MEPC 60/4/35, explained that the proposal followed the concept that had been discussed over the past two years, which was to calculate the Attained EEDI for each new ships, and to require the Attained EEDI to be equal to, or lower than, the Required EEDI to be determined by the baseline and the EEDI reduction rates (x).

The delegation of Japan elaborated on the reasons for using MARPOL Annex VI as the legal instrument: the MARPOL Convention had well-established and workable survey and certification provisions, and it could provide a similar legal basis for the mandatory EEDI and SEEMP requirements, and the amendments to MARPOL Annex VI would be the fastest path to implement such requirements as mandatory measures.

Moreover, the delegation of Japan explained that the three-phase approach was used in the proposed text, where the EEDI reduction rates were set for each of the three periods of five [5] years intervals, so the Required EEDI becomes more stringent step-by-step. It further emphasized that the draft text was developed in such a way that it could cater for the concerns of particular ship types, so that different application was possible for those ship types. Japan elaborated on the methodology of setting the reduction rates (x), which should be based on analysis of the EEDI improvement rates by applying certain combination of technologies that could improve the energy efficiency for a ship.

In conclusion, Japan pointed out that IMO had gone through the stage of developing the recommendations regarding the EEDI and that testing of the suitability and robustness of the EEDI had been on-going for a considerable time; it was the right time to continue work on the draft regulatory text while the remaining technical work, such as consideration of reduction rates should be done concurrently.

4.27 A clear majority of the delegations taking the floor supported the introduction of mandatory technical and operational energy efficiency measures, and that MARPOL Annex VI was the most appropriate instrument for such measures. It was argued that establishment of mandatory technical and operational measures were of utmost importance for IMO to contribute to the concerted efforts by the world community to stem climate change. A number of delegations reasoned that MARPOL Annex VI was suitable based on its definitions, in particular its definition of emissions, and that expanding the scope would be in

line with adoption of Annex VI itself and the mandate of the Committee. Introduction of energy efficiency measures leading to reduced emissions from ships fell within the scope of the MARPOL Convention itself and, in particular, within the scope of Annex VI. Also delegations that at earlier sessions had expressed concerns over utilizing MARPOL Annex VI for such regulations, fully supported the proposal due to the time needed compared to other ways such as developing a new freestanding instrument. Many delegations stated that using Annex VI was the only realistic route.

4.28 Some delegations expressed the view that the EEDI formula still needed extensive work and some expressed concerns related to specific ship types. Further concerns were expressed that the EEDI could lead to underpowered ships resulting in unsafe ships in harsh weather conditions, and that an engine power to DW ratio may be included in the regulations. The Committee was reminded by a number of delegations that Annex VI already regulates ozone-depleting substances and that such substances are closely related to GHGs. It was also reminded that CO<sub>2</sub> is one of the primary contributors to ocean acidification.

4.29 A number of delegations expressed the view that MARPOL Annex VI was not the proper legal instrument to include energy efficiency measures for ships, that such measures were not within the scope and that the structure of Annex VI prevented such measures to be effective. Concern was also expressed over the maturity of the measures, and a number of delegations advocated that further development was needed, followed by a suitable period for trials and testing, before consideration of mandatory measures should commence. A number of delegations supported further development of the energy efficiency measures but objected to considering such measures as mandatory.

4.30 A number of delegations recalled the provisions of Assembly resolution A.998(25) on the need for capacity building for the development and implementation of new and amendments to existing instruments, and the need to assess the possible impact on developing countries.

4.31 The delegation of Vanuatu suggested an alternative approach for IMO to provide a short-term contribution to reducing GHG emissions from vessels. It stated that the possibility exists to reduce vessel emissions of Methane from marine sanitary devices. Since Methane has a warming potential approximately 20 times as effective as CO<sub>2</sub> in the atmosphere, even just flaring these gasses would provide a beneficial result. It had been shown that Methane in the atmosphere eventually decays to CO<sub>2</sub> anyway, so doing this would not result in *additional* CO<sub>2</sub> in the atmosphere. As a longer term policy, IMO could consider what some

cruise ships are already currently trialling; that is, using methane to power auxiliary machinery. IMO could possibly follow this trend in requiring the used methane-supplemental power generation concepts as a vehicle for pursuing GHG "indulgences" if emissions trading or other market-based schemes come to fruition. Currently the technology does exist that could make use of even smaller crew manned vessels to install methane power-cell generators. Cruise ships and livestock carriers could probably, even now, conventionally generate enough power to significantly supplement hotel load power generation.

### ***Intervention by the Secretary-General***

4.32 The Committee welcomed an intervention by the Secretary-General as set out below:

"The Committee will recall that, in suggesting, in my opening speech yesterday, the objectives we should aim at achieving, I proposed that we should finalize the technical and operational measures we have been working on for some considerable time – by approving them, as amendments to MARPOL Annex VI, at this session of the Committee and adopting them at the September/October session.

I did so within my assessment of the overall situation, in which I had taken into account, with due care and concern, not only the technical but also the political aspect of the matter, especially, the need to ensure that IMO's response to present and real issues of global nature, such as climate change, should be timely and appropriate.

I have no doubt that the Committee Members know and understand fully the repercussions, time-wise, of a decision not to seek cover under MARPOL Annex VI but, instead, to opt for a stand-alone instrument.

I do understand the argumentation behind this Organization's decision to go for a new instrument in the case of the BWM and Ship Recycling Conventions, as articulated by India.

And I do understand and respect the legal concerns at national level invoked by China.

At the same time, I hope that the Committee would duly appreciate that, in suggesting the Annex VI avenue I did yesterday, I would not risk advising the

Committee to do something, which would eventually jeopardize the Organization's credibility in case it had, for well-meant reasons, opt for a solution the legal grounds of which would be questionable.

It is for this reason that I asked the Legal Office to consider the issue and advise the Committee whether there was any legal barrier to the Annex VI Parties agreeing to expand the scope of Annex VI to accommodate the proposed technical measures.

Mr. Young, Deputy Director of the Legal Office, has, together with Dr. Balkin, examined the issue and is here to advise the Committee."

4.33 With regard to the issue of whether amendment of MARPOL Annex VI to add provisions on energy efficiency/reduction of GHG emissions (as proposed in document MEPC 60/4/35), would be consistent with legal requirements, Mr. Young provided the following opinion:

"The basic amendment procedures are set out in article 16 of MARPOL 1973 (extended by article VI of the 1978 Protocol). Article 16(2)(iii) allows for tacit acceptance of amendments to an Annex adopted after consideration by the Organization.

The 1997 Protocol added Annex VI to the MARPOL Convention and provided, in article 4, that "In applying article 16 of the Convention to an amendment to Annex VI and its appendices, the reference to 'a Party to the Convention' shall be deemed to mean the reference to a Party bound by that Annex".

The Convention (in paragraph 7 of article 16) provides its own two-part test for assessing a proposed amendment: any amendment to a Protocol or to an Annex shall (a) relate to the substance of that Protocol or Annex and (b) shall be consistent with the articles of the present Convention.

Taking into account the fact that Assembly resolution A.963(23) noted that resolution 8 of the 1997 Air Pollution Conference "invited the MEPC to consider what CO<sub>2</sub> reduction strategies may be feasible given the relationship between CO<sub>2</sub> and atmospheric pollutants, especially NO<sub>x</sub>, since NO<sub>x</sub> emissions may exhibit an inverse relationship to CO<sub>2</sub> reductions", a sound substantial relationship would appear to be established between the proposal and the current Annex VI. This can be said to meet part (a) of the test under paragraph (7) of article 16.



Part (b) of the two-part test under article 16(7) concerns consistency in terms of the objects and purposes of the MARPOL Convention as measured by such elements as the definitions. For example, article 2 of the Convention defines "Discharge" as meaning "any release howsoever caused from a ship and includes any escape, disposal, spilling, leaking, pumping, emitting or emptying". Emissions from inefficient ships' engines burning low grade fuel would appear to fall squarely within this definition.

As a further example, the term "Harmful substance" is defined in the Convention as meaning "any substance which, if introduced into the sea, is liable to create hazards to human health, to harm living resources and marine life", etc. It may be recalled that resolution 8 of the 1997 Air Pollution Conference recognized that "CO<sub>2</sub> emissions, being greenhouse gases, have an adverse effect on the environment". Therefore, the harmful impact, as required under MARPOL, would appear to be an accepted fact for purposes of the present discussion. Furthermore, the fact that the MARPOL definition refers to substances "introduced into the sea" could have been used to prevent Annex VI itself from being adopted in 1997; the fact that the definition was not used in this way means that the Annex is its own precedent for using MARPOL to develop the current proposals.

The Legal Office also examined the 1969 Vienna Convention on the Law of Treaties for provisions that might be helpful in determining the issue. That Convention does not have any provision which prevents Parties from amending a treaty to expand its scope in a way that is acceptable to the Parties concerned. Such questions are therefore left for the Parties themselves to determine.

Accordingly, in the view of the Legal Office, there is no legal barrier to the Parties to Annex VI agreeing to expand the scope of the Annex as proposed."

4.34 The Committee agreed by clear majority that MARPOL Annex VI was the appropriate vehicle for enacting energy efficiency requirements for ships and that the proposed measures were commensurate, timely and would assist the Organization in maintaining its leading position as the relevant body to regulate all aspects of international shipping – including emissions control, and that the working group should be instructed accordingly.

4.35 The Committee agreed to revisit the time line for introduction of mandatory technical and operational measures when considering the outcome of the working group, but the aim should be, as proposed by the Secretary-General in his opening speech and supported by a clear majority, to finalize within this year the initial technical and operational measures – by approving them, as amendments to MARPOL Annex VI, at this session and adopting them at the September/October session.

4.36 The delegations of Brazil, China, India and Saudi Arabia reserved their position on inclusion of mandatory technical and operational energy efficiency regulations in MARPOL Annex VI.

### **Establishment of the Working Group on Energy Efficiency for Ships**

4.37 The Committee, having considered the tasks it intended to assign to the working group, agreed to rename it as the Working Group on Energy Efficiency for Ships.

4.38 The Committee established the Working Group on Energy Efficiency for Ships with the following Terms of Reference:

The Working Group on Energy Efficiency Measures for ships is instructed, taking into account all relevant documents as well as comments and decisions made in plenary, to:

- .1 consider document MEPC 60/4/32 (IACS) and provide advice on the way ahead and, if that advice includes action such as issuing of a circular, then develop the necessary draft for the Committee's consideration with a view to its adoption at this session;
- .2 consider document MEPC 60/4/38 (Norway) and provide advice on whether or not the information is relevant and of the same nature as the technical information in MEPC.1/Circ.680, and if so, develop a draft separate circular with the necessary references to MEPC.1/Circ.680 for the Committee's consideration with a view to its approval at this session;
- .3 review and develop the text for mandatory requirements of EEDI including further improvements of the calculation method and the EEMP by adding a new part to MARPOL Annex VI, with a view to finalization at this session, using the annex to document MEPC 60/4/35 as base document, including:

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- .1 coverage of ship types and ship sizes for the EEDI;
  - .2 target year for phases 1, 2 and 3 for the EEDI;
  - .3 establishment of EEDI baseline(s);
  - .4 reduction rate X from the baseline for phase 1 for the EEDI; and
  - .5 coverage of ship sizes and implementation time for the EEMP;
- .4 consider the formula for establishing the EEDI baseline, and framework and supporting guidelines for calculation of baselines for use with the EEDI, taking into account documents MEPC 60/4/7 and MEPC 60/4/15;
  - .5 consider the need for guidelines to support the regulatory framework for verification of the EEDI taking into account MEPC.1/Circ.682;
  - .6 in relation to making the EEMP mandatory, consider the need for supporting guidelines, e.g., based on MEPC.1/Circ.683;
  - .7 review the method of calculation of the EEDI for other ship types and sizes than those referred to in paragraph 3.1 above; and
  - .8 submit a written report to plenary on Thursday, 25 March 2010.

4.39 The delegations of China and Saudi Arabia could not agree to some of the Terms of Reference for the working group and reserved their positions.

### **Outcome of the Working Group on Energy Efficiency for ships**

[4.40 In his introduction of the report of the Working Group on Energy Efficiency for Ships (MEPC 60/WP.9), the Chairman, Mr. Koichi Yoshida (Japan) of the working group highlighted the significant progress made at this session on the technical and operational measures to increase energy efficiency.

He thanked the members of the group for their hard work, their flexibility and willingness to negotiate and to reach compromises and thereby securing a successful outcome. In his view, the package of mandatory technical and operational reduction measures would contribute notably to increasing energy efficiency in shipping and to maintain the Organization's leading position on control of greenhouse gases from international maritime transport.]

***Actions taken on the report of the working group***

4.41 Having considered the report of the working group, the Committee approved it in general and, in particular (paragraph numbers are those of MEPC 60/WP.9 unless stated otherwise):

- [.1 approved the MEPC resolution on the revised form of supplement to IAPP Certificate, as set out in annex 1 to MEPC 60/WP.9 (paragraph 4.3);
- .2 endorsed the group's recommendation that Member Governments be urged to use the revised form of supplement to IAPP Certificate at the earliest available opportunity when issuing the supplement in accordance with the revised MARPOL Annex VI and approved the MEPC Circular for this purpose as set out in annex 2 to MEPC 60/WP.9 (paragraph 4.4);
- .3 approved the MEPC.1/Circular on technical information on CVOC system to assist development of VOC management plan as set out in annex 3 to MEPC 60/WP.9 (paragraph 5.3);
- .4 noted the guidelines for calculating the baselines using the data of existing ships in the LRFP database, as set out in annex 4 to MEPC 60/WP.9 (paragraph 6.19);
- .5 endorsed the agreement of the group on development of guidelines to support the regulatory framework for verification of the EEDI taking into account MEPC.1/Circ.682 (paragraph 7.7);
- .6 endorsed the view of the group on the need for supporting guidelines, e.g. based on MEPC.1/Circ.683 (paragraph 8.2);
- .7 noted that there are still unresolved issues on ship size, target dates and reduction rate in relation to the requirements of EEDI (paragraphs 9.9, 9.11, 9.12 and 9.16);
- .8 considered the draft text for mandatory requirements of the EEDI and the SEEMP as set out in annex 5 to MEPC 60/WP.9 (paragraph 9.16); and
- .9 considered the need to hold an intersessional working group on energy efficiency measures for ships and also considered the draft terms of

reference for the meeting as set out in annex 6 to MEPC 60/WP.9 (paragraph 12.1).]

4.42 The Committee expressed appreciation to the Chairman and the members of the Working Group for the considerable amount of work undertaken.

**[Statements by .....**

4.43 The delegations of ..... made statements on issues related to the energy efficiency measures considered by the working group at the closing of the session. As requested, the statements are set out in annex .... to this report.]

**Market-based instruments**

4.44 The Committee recalled that resolution A.963(23) on IMO policies and practices related to the reduction of greenhouse gas emissions from ships urged the Committee to identify and develop the mechanisms needed to achieve limitation or reduction of GHG emissions from international shipping and, in doing so, to give priority, *inter alia*, to the evaluation of technical, operational and market-based solutions. Recognizing that technical and operational measures alone would not be sufficient to satisfactorily reduce the amount of GHG emissions from international shipping and, in view of projections that world trade would continue growing, market-based mechanisms had been considered by the Committee in line with the work plan agreed at MEPC 55.

4.45 It was also recalled that the Committee, at its last session, held an in-depth debate on market based mechanisms and noted that such a mechanism could serve two main purposes: the offsetting of growing ship emissions and the provision of incentives for the maritime industry to invest in more fuel efficient ships and to operate ships in a more energy efficient way. In addition, some of the proposed market-based mechanisms could generate funds, which could be used for different climate-related purposes, such as mitigation and adaptation activities in developing countries.

4.46 Moreover, the Committee recalled that, in addition to identifying a considerable reduction potential, the Second IMO GHG Study 2009 concluded that market-based mechanisms were cost-effective policy instruments with a high environmental effectiveness. The Committee, at its last session, having considered a large number of views and contributions on the subject; agreed by overwhelming majority that a market-based mechanism was needed as part of a comprehensive package of measures for the regulation of GHG emissions from international shipping.

4.47 Finally, the Committee recalled that, at its last session, having made significant progress on the development of technical and operational measures, it had conducted an in-depth discussion on market-based mechanisms. In its willingness to further consider this complex issue and fulfil the requests of the Assembly in resolution A.963(23), the Committee agreed on a work plan for further consideration of market-based measures, building on discussions and submissions from its last, and earlier sessions. The work plan for further consideration of market-based measures stated that: "In order to carry out the work plan efficiently and effectively, the Committee agreed further that future sessions of the Committee may need to develop appropriate inclusive working arrangements".

***Chairman's proposal for further progress***

4.48 The Committee considered paragraphs 5 to 11 of document MEPC 60/4/57, submitted by the Chairman, and recalled that Members at the last session were encouraged to submit further detailed outlines of possible market-based instruments (MBI) to this session. The Committee noted that it had received 20 session documents and four information documents, from which nine distinguishable MBI proposals, or variants of some of the proposals, had been identified as listed in paragraph 6 of the mentioned document.

4.49 Although the proposals had different levels of maturity and detail, and some appeared before the Committee for the first time, from conceptual outlines to fully matured proposals with most details developed, the Committee agreed to treat all proposals equally.

***Methodology for feasibility studies and impact assessments***

4.50 In accordance with paragraph 2 of the work plan for further consideration of market-based measures, the Committee agreed that, at this session, it should focus on developing the methodology and criteria for feasibility studies and impact assessments of the proposed mechanisms, giving priority to the overall impact on the maritime sectors of developing countries, while avoiding a debate on the different proposals individually in any detail – a task that should be earmarked for the next session – MEPC 61.

4.51 The Committee noted that the work plan for further consideration of market-based measures assumed, in paragraph 3, that the outcomes of feasibility studies and impact assessments would be available to MEPC 61, thus enabling the Committee to make further progress.

4.52 The Chairman, in introducing his proposal (document MEPC 60/4/57, paragraphs ... to ...), stated that feasibility studies and impact assessments could, in other circumstances, have been undertaken through correspondence, or specific tasks could have been covered by different Member States, or a study could have been commissioned. However, conscious of the political sensitivity attached to the issue and the limited time available prior to MEPC 61, as well as drawing on comments made when the issue was addressed at earlier sessions, he had concluded that an expert group with representative composition and clear Terms of Reference was the most workable option to undertake the feasibility study and impact assessment.

4.53 An overwhelming majority of those delegations that spoke supported the proposal of the Chairman, that the feasibility studies and impact assessments called for by paragraph 2 of the work plan for further consideration of market-based measures should be undertaken by an expert group. A number of delegations highlighted the need for balanced and representative composition of the group, representing all geographic regions, as well as all relevant stakeholders and interests.

4.54 The Secretary-General stated that the Committee's decision to undertake a feasibility study and impact assessment of the proposed MBIs as outlined in document MEPC 60/4/57 was a positive step in the right direction and that the task should be entrusted to an expert group to be composed of experts made available by Member Governments and observer organizations representing, to the extent possible, the entire geographical spread and specific interests of the Organization. As he had mentioned in his opening speech, the envisaged Group should be able to advise the Committee to make the right choice among the various MBMs proposed and thus bring to a successful conclusion an issue of undeniable complexity and sensitivity that had attracted considerable interest in many capitals and decision-making centres all over the world.

4.55 Prompt action would be taken, in consultation with the Chairman, to ensure that all the formalities required for the composition of the expert group and all the preparatory work leading to the Group's first meeting would be carried out in a thorough and timely manner.

4.56 The delegation of Brazil supported by the delegations of China and Cuba asserted that, in the absence of a clear outcome of the Copenhagen Conference, further work on market-based mechanisms under IMO should be postponed until after COP 16/CMP 6 that would be held in Mexico in the end of the year. Other delegations, while supporting the establishment of the group, advocated that the principle under the UNFCCC of common but

differentiated responsibility and respective capabilities should be at the forefront of the exercise.

4.57 Delegations supporting the setting up of an expert group to undertake the feasibility study and impact assessment argued that the Committee, when agreeing on the work plan at the last session, had taken into account the possibility that no firm outcome on emissions from international maritime transport of the Copenhagen Conference was possible, and that this should not prevent IMO from discharging its responsibilities in contributing to stem climate change. Other delegations reminded the Committee that the main goal in this regard should be the reduction in emissions and not the generation of funds. It was also stated by some delegations that developing countries might have problems in sending experts to the group due to the long distance involved and the associated costs.

4.58 The Committee agreed that an expert group was the best available solution to undertake the feasibility study and impact assessment of market-based mechanisms called for by the work plan and the Secretary-General was requested to establish the group on feasibility study and impact assessment in close consultation with the Chairman.

4.59 The Committee also agreed that it was imperative to adhere to the work plan for further consideration of market-based measures. The Committee noted that paragraph 3 of the work plan stated that, taking into account the outcome of the feasibility studies and impact assessments, the Committee, preferably at MEPC 61 would be in a position to clearly indicate which market-based instrument it should evaluate further, and agreed to take all the necessary steps to comply with that requirement. This included that any new or updated proposals that might be submitted to future sessions, would not be subject to the same type of feasibility study and impact assessment by an expert group.

#### **Selection of MBI proposals for review**

4.60 The Committee considered the proposals listed in paragraph 6 of document MEPC 60/4/57 and agreed that document MEPC 60/4/10 by the Bahamas should also be included. Consequently, the MBI proposals that would undergo the feasibility study and impact assessment to be undertaken by the MBI expert group were the following:

MEPC 60/4/8	Cyprus, Denmark, the Marshall Islands, Nigeria and IPTA	An International Fund for Greenhouse Gas emissions from ships
MEPC 60/4/10	Bahamas	Market-Based Instruments: a penalty on trade and development



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MEPC 60/4/12	United States	Further details on the United States proposal to reduce greenhouse gas emissions from international shipping
MEPC 60/4/22	Norway	A further outline of a Global Emission Trading System (ETS) for International Shipping
MEPC 60/4/26	United Kingdom	A global emissions trading system for greenhouse gas emissions from international shipping
MEPC 60/4/37	Japan	Consideration of a market-based mechanism: Leveraged Incentive Scheme to improve the energy efficiency for ships based on the International GHG Fund
MEPC 60/4/39	WSC	Proposal to Establish a Vessel Efficiency System (VES)
MEPC 60/4/40	Jamaica	Achieving reduction in greenhouse gas emissions from ships through Port State arrangements utilizing the ship traffic, energy and environment model, STEEM
MEPC 60/4/41	France	Further elements for the development of an Emissions Trading System for International Shipping
MEPC 60/4/55	IUCN	A rebate mechanism for a market-based instrument for international shipping

4.61 The Committee also agreed that the documents providing comments or support on the above-listed proposals should not be introduced or considered at this session but be included in the document base for the MBM expert group. These documents were the following:

MEPC 60/4/43	France, Germany, Norway and the United Kingdom;
MEPC 60/4/49	Greece;
MEPC 60/4/51	Japan; and
MEPC 60/4/53	Greenpeace International and WWW.

4.62 The Committee agreed that for the ten proposals that would be reviewed by the MBM expert group, a focal point for each of them should be appointed by the proponents.

***Criteria for the feasibility study and impact assessment***

4.63 The Committee considered document MEPC 60/WP.7, submitted by the Chairman, on the criteria to be applied in the feasibility study and impact assessment. The Committee noted that a number of submissions both to this and earlier sessions provided input to this debate and that the Secretariat had been requested to summarize relevant submissions and to present possible options on how such criteria may be organized and articulated to facilitate the Committee's debate on this vital subject.

4.64 The Chairman, in his introduction, noted that the Secretariat had identified two possible approaches based on a range of submissions and found that the criteria might either be in the form of a high level approach – called “Bird’s view approach” in annex 1 of the document, whereby the expert group would agree on the detailed criteria, or a more detailed approach – called “Bottom-up approach” in the note, whereby the Committee would agree on detailed criteria during the session. The two approaches could also be combined by using the first one as the scope of the exercise and the second one giving the detailed criteria to be applied in the in-depth assessment or evaluation of the ten proposals.

4.65 The Committee noted that the Secretariat had taken into account the following submissions in preparing annex 1 to document MEPC 60/WP.7: MEPC 60/4/54 by Germany; MEPC 60/4/13 by ICS; and MEPC 60/4/50 by OCIMF.

4.66 The Committee, with the help of an informal group, developed the criteria further, based on comments and input provided by Member States and observer organizations, and agreed to the finalized criteria as part of the terms of reference for the MBM expert group.

***Work arrangements and draft Terms of Reference for the MBI-EG***

4.67 The Committee considered the work arrangements and the draft terms of reference (ToR) for the expert group as set out in the annex to document MEPC 60/4/57, and developed the ToR further based on comments and input provided by Member States and observer organizations. The Committee agreed to the final ToR as set out in annex [...].

[more to come]

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***Legal aspects and application principles***

4.68 The Committee noted that the legal aspects and application principles would be considered in detail by the expert group for each proposal under review and should, therefore, not be debated as separate issues. The documents deferred from MEPC 58 and MEPC 59, as listed in paragraph 2 of document MEPC 60/4, were, in accordance with paragraph 4.3 of the Committee's guidelines, not introduced in plenary. Members were invited to submit updated documents to future sessions on any outstanding matters, with the possibility of making reference to former submissions to avoid reprinting of text that was still relevant.

**Information documents on GHG issues**

4.69 The Committee noted the following information documents and working papers:

MEPC 60/INF.6 by Finland and Sweden, on Impact of the ice-class correction factors  $f_i$  and  $f_j$  on calculation of EEDI (that would be taken into account by the working group);

MEPC 60/INF.7 by Denmark on the effects on sea transport cost due to an International Fund for GHG emission for ships (that would be taken into account by the MBM expert group in connection with review of document MEPC 60/4/8);

MEPC 60/INF.8 by France, providing practical aspects of a global emissions trading scheme for international shipping (that would be taken into account by the MBM expert group in connection with review of document MEPC 60/4/41);

MEPC 60/INF.12 by the World Bank on climate change mitigation finance in the maritime sector;

MEPC 60/INF.18 by the Secretariat, providing an assessment of the energy efficiency measures for the control of GHG emissions from ships agreed by MEPC 59 (that would be taken into account by the working group);

MEPC 60/INF.19 by Norway, providing updated Marginal Abatement Cost Curves for shipping (that would be taken into account by the working group);

MEPC 60/INF.20 by FOEI, on new inventories on short lived climate forcing aerosols from international shipping in the Arctic;

MEPC 60/INF.21 by the Secretariat providing the outcome of a scientific study on international shipping and market-based instruments;

MEPC 60/INF.23 by the Secretariat, on the development of a draft model course for energy efficient ship operations by the World Maritime University;

MEPC 60/WP.5 by the Secretariat, providing Information to facilitate discussion on GHG emissions from ships; and

MEPC 60/WP.6 by the Secretariat, containing communication with the IPCC on CO<sub>2</sub> Conversion Factors (that would be taken into account by the working group).

### **Reduction targets for international shipping**

4.70 The Committee recalled that, at the last session, there was a general agreement that the topic of reduction levels should be revisited at this session and invited additional contributions to ensure an informed debate in order to advance on the issue satisfactorily. The Committee noted that reduction potential would be considered for each proposed market-based instrument as part of the impact assessment.

4.71 The Committee would need to consider whether the international maritime sector should be subject to an explicit emission ceiling (cap) or a reduction target comprising the entire world fleet of merchant vessels. The paramount questions would be how and by which international organization such a cap or reduction target should be established. Other questions related to a cap or a target line would include the methodology by which the cap/target is set and maintained as well as the possible connection with other transport modes and how they are regulated internationally.

4.72 The Committee considered document MEPC 60/4/23 by Norway on alternative emissions caps for shipping in 2020 and 2030. In introducing the document, the delegation of Norway, on behalf of the three sponsors, underlined that the issue of setting a cap would be important in the further deliberations of the Committee. Using examples for various national policies on reduction commitments in future agreements under the UNFCCC as a basis, corresponding global emission caps for shipping were calculated using a methodology based on marginal costs of measures. A cap could be used in an emission reduction mechanism for shipping.

4.73 The Committee also considered document MEPC 60/4/28 by the World Shipping Council (WSC) on emissions caps and reduction targets for the shipping sector. The

observer delegation of WSC, in its introduction, argued that the policy approach and targets for the maritime sector should be consistent with the approach taken for the entire transportation sector across the world. The targets should be substantive targets applicable to improving the relative efficiency of the world's fleet and not caps. WSC and its member companies believed that IMO should articulate targets for further improving the efficiency of the world's fleet – applicable to both new and existing ships that would deliver real energy efficiency improvements in the maritime transportation sector itself.

4.74 The delegation of IUCN made reference to relevant parts of its submission document MEPC 60/4/55 that described how to eliminate the need for a global cap on international shipping's GHG emissions. The emission cost for shipping would be linked to the global carbon price established by other sectors. A share of a country's imports was proposed as a key to calculate a country's usage of international shipping. The key could be used for accounting purposes and was readily available.

4.75 The Committee agreed that the debate on the reduction targets was a vital part of the Organization's GHG work and would need further progress at the next session so the Committee may be closer to a conclusion at MEPC 61 with the aim to conclude on the matter simultaneously with the culmination of the work plan for further consideration of market-based measures at MEPC 62 in July 2011. Interested delegations were invited to submit further input to the next session to assist the Committee in its work on this issue.

#### **Other GHG issues – Black carbon and the Arctic**

4.76 The Committee considered document MEPC 60/4/24 by Norway, Sweden and the United States, on reduction of black carbon from shipping in the Arctic. On behalf of the co-sponsors, the delegation of Norway underlined the severe effects that emissions of black carbon have on climate change and pollution in the Arctic. Black carbon could accelerate global warming and ice melting and needed the focus of IMO. Because of the incomplete combustion of marine fuel oil, shipping is a significant source of such emissions and due to the expected increase in shipping activity in the Arctic region, the problems with emissions of black carbon from shipping will increase. The document contained proposed response actions to be established by IMO and the co-sponsors invited the Committee to take action on these proposals.

4.77 The Committee had a brief exchange of views on whether separate actions were needed to reduce shipping impacts in the Arctic region and how this should relate to the general work on prevention of air pollution from ships under MARPOL Annex VI and the

Organization's work on control of ships' GHG emissions and agreed that ship's emissions of black carbon and other particulate matter affecting the Arctic region, needed to be addressed specifically as an integral part of the Organization's work on prevention of air pollution from ships and its contribution to combat climate change and global warming. It agreed also that the matter should be revisited at the next session and invited interested delegations to submit proposals for specific pollution control measures to facilitate progress.

## **5 CONSIDERATION AND ADOPTION OF AMENDMENTS TO MANDATORY INSTRUMENTS**

5.1 The Committee recalled that MEPC 59 had approved, with a view to adoption at this session, draft amendments to:

- .1 MARPOL Annex I on the use or carriage of oils in the Antarctic area (MEPC 59/24, paragraph 10.20 and annex 28); and
- .2 MARPOL Annex VI on the North American Emission Control Area (MEPC 59/24, paragraph 4.32.13 and annex 11).

5.2 The Committee noted that the texts of both approved amendments were circulated on 31 July 2009 by the Secretary-General under cover of Circular letter No.2986, in accordance with the provisions of article 16(2)(a) of the MARPOL Convention.

5.3 The Committee also recalled that MEPC 59 had agreed, in principle, that a drafting group would be established at MEPC 60 to make any editorial changes to the draft amendments, as necessary, before adoption by the Committee.

### **Amendments to MARPOL Annex I (use or carriage of oils in the Antarctic area)**

5.4 The Committee noted that the proposed amendments to MARPOL Annex I, as shown in the annex to document MEPC 60/5, concerned the inclusion of a new chapter 9, entitled "Special requirements for the use or carriage of oils in the Antarctic area" incorporating a new regulation 43. The main characteristics of the proposed new regulation are to:

- .1 establish a ban on the use or carriage as cargo of heavy grade oils;
- .2 make an exception for SAR and salvage vessels; and
- .3 determine that cleaning of tanks/piping if heavy grade oil was carried previously is not required.

5.5 The Committee agreed to send the draft amendments to the Drafting Group for editorial review.

#### **Amendments to MARPOL Annex VI (North American Emission Control Area)**

5.6 The Committee noted that the draft amendments to MARPOL Annex VI relate to regulations 13.6 and 14.3 of this Annex for the establishment of the North American Emission Control Area. Document MEPC 60/5/1 provided the basic text of the draft amendments as approved by MEPC 59 with the text of regulation 13.6 contained in square brackets, stipulating that the boundaries of the proposed ECA "will be replaced by full coordinates".

5.7 The Committee noted further that document MEPC 60/5/2 set out the full coordinates of the proposed ECA, as provided by the United States, comprising the sea areas off the Pacific coasts of the United States and Canada; off the Atlantic coasts of the United States (including the US part of the Gulf of Mexico), Canada and France; and off the coasts of the Hawaiian Islands. The proposal to add a new Appendix VII to MARPOL Annex VI to set out the full coordinates for this ECA was made in recognition of the fact that these coordinates are rather extensive and, if included in the short text of the amendments, they would make regulation 14.3 of Annex VI look cluttered.

5.8 The Committee noted that the Canadian Minister of Transport, in his letter of 17 March 2010 to the Secretary-General of IMO, had given his "highest assurances that Canada's ratification of MARPOL Annex VI was imminent", following the adoption by the Canadian Parliament of a package of nine maritime conventions, including MARPOL Annex VI, on 23 November 2009, and stated that Canada placed a particular priority on the adoption of the North American Emission Control Area, an initiative with which they were partners with the United States and France.

5.9 The delegation of Canada anticipated that the required instrument of ratification would be deposited with the Secretary-General during this session of the Committee.

5.10 The Committee agreed to refer the draft amendments to the Drafting Group for editorial review.

#### **Establishment of the Drafting Group**

5.11 The Committee established the Drafting Group under the chairmanship of Mr. Zafrul Alam (Singapore) and instructed it to:

Using documents MEPC 60/5, MEPC 60/5/1 and MEPC 60/5/2 as a basis:

- .1 review and finalize the texts of the draft amendments to MARPOL Annex I (Use or carriage of oils in the Antarctic area) and MARPOL Annex VI (North American Emission Control Area);
- .2 prepare two draft MEPC resolutions for adoption of the two sets of amendments to MARPOL Annex I and Annex VI, respectively; and
- .3 submit a written report to the plenary on Thursday, 25 March 2010.

#### **Report of the Drafting Group and action taken by the Committee**

[5.12 In introducing the report of the Drafting Group on Amendments to Mandatory Instruments (MEPC 60/WP.10), the Chairman, Mr. Zafrul Alam (Singapore), emphasized the following:

- .1 with regard to the draft amendments to MARPOL Annex I, the Drafting Group had included, in the final sentence of draft regulation 43.1, a reference to the definition of the "Antarctic area" contained in MARPOL Annex I, regulation 1.11.7;
- .2 in respect of the draft amendments to MARPOL Annex VI, the Drafting Group had used document MEPC 60/5/2 as the base text, and had noted the confirmation by the delegations of Canada and the United States that their Administrations had carefully checked the coordinates of the North American Emission Control Area, as shown in the draft amendments;
- .3 noting that these coordinates were based on the "North American Datum of 1983/World Geodetic System 1984 (NAD83/WGS84)", the Drafting Group had deleted this reference from the text of the draft amendments, as no source references for coordinates are recorded in the MARPOL Convention describing sea areas (e.g., "Special areas" under Annex I). The Drafting Group agreed to recommend that, after adoption of the amendments by the Committee, this reference should be included in an MEPC circular with information on the North American Emission Control Area, together with a map; and



- .4 the Drafting Group also agreed to recommend that the draft Appendix VII should be used solely to describe the coordinates of the North American Emission Control Area. In this way, the Committee would have the freedom, if a new ECA is proposed in the future, to consider only an amendment to the relevant regulations, or to add another appendix to the revised MARPOL Annex VI, depending on the length of the coordinates of such an ECA.

5.13 The Committee approved the report of the Drafting Group in general and, in particular:

- .1 endorsed the recommendation to use the draft Appendix VII solely for describing the coordinates of the North American Emission Control Area;
- .2 confirmed the dates in both draft MEPC resolutions concerning the "deemed acceptance" (1 February 2011) and "entry into force" (1 August 2011) of the new amendments, in accordance with articles 16(2)(f)(iii) and 16(2)(g)(ii), respectively, of the 1973 MARPOL Convention;
- .3 adopted, by resolution MEPC....(60), amendments to the Annex of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (Addition of a new chapter 9 to MARPOL Annex I), as set out in annex ...;
- .4 adopted, by resolution MEPC....(60), 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 (Amendments to regulations 13, 14 and new Appendix VII of MARPOL Annex VI establishing the North American Emission Control Area), as set out in annex ...;
- .5 instructed the Secretariat to check the amendments carefully for any editorial omissions and, if necessary, insert these in the final text of the amendments; and
- .6 instructed the Secretariat also to prepare and disseminate an MEPC circular in relation to paragraph 5.12.3, as shown above.

5.14 The Committee expressed appreciation to Mr. Zafrul Alam (Singapore) and the members of the Drafting Group for the work done.]

## **6 INTERPRETATIONS OF, AND AMENDMENTS TO, MARPOL AND RELATED INSTRUMENTS**

6.1 The Committee noted that, at the current session, 15 substantive and two information documents had been submitted under this agenda item.

6.2 The Committee agreed to consider the documents in the following order: (1) those proposing amendments to MARPOL Annex IV and comments thereto; (2) those proposing amendments to MARPOL Annexes I and II and comments thereto; (3) one document proposing amendments to MARPOL Annexes I, II, IV, V and VI (waste reception facilities in ship recycling sites); (4) one document proposing amendments to MARPOL Annex III; (5) progress report of the correspondence group for the review of MARPOL Annex V and comments thereto; and (6) a proposal for Interim guidelines for the Oil Record Book and comments thereto.

### **Proposed amendments to MARPOL Annex IV**

6.3 The Committee recalled that, at MEPC 59, it had considered a proposal by the WWF (MEPC 59/14) to encourage voluntary restraint by passenger ships to discharge sewage into the Baltic Sea and other closed or semi-closed seas to address the problem of eutrophication due to the presence of nutrients in the discharged sewage. The proposal had been supported by the delegation of Finland who announced that the Baltic States, working through the Helsinki Commission, would submit a proposal to amend MARPOL Annex IV to a future session of the Committee. As a result of the debate, the Committee had agreed to issue MEPC.1/Circ.685 encouraging all passenger ships trafficking in closed or semi-closed seas to refrain from discharging their waste water into the sea.

6.4 The delegation of Finland introduced document MEPC 60/6/2 (Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland, Russian Federation and Sweden) proposing to amend regulations 1, 9 and 11 of MARPOL Annex IV as well as the Form for International Sewage Pollution Certificate, with the aim of incorporating the concept of Special Area, now absent in the Annex, and establishing a ban for the discharge of sewage from passenger ships within those areas except when complying with new strict standards for nutrient concentration in the effluent. The Baltic Sea was proposed for designation as a Special Area under MARPOL Annex IV. An amendment to the Revised guidelines on implementation of

effluent standards and performance tests for sewage treatment plants (resolution MEPC.159(55)) setting up a new nutrient removal standard was also proposed.

6.5 Denmark and co-sponsors, in document MEPC 60/6/3, also proposed amendments to the Guidelines for the Designation of Special Areas (resolution A.927(22)) in order to include "sewage" in the list of substances (oil, etc) and citing MARPOL Annex IV in line with other MARPOL Annexes in the text of the resolution.

6.6 The Committee noted information document MEPC 60/INF.4 (Denmark *et al.*) with information and statistical data in support of the proposal.

6.7 The Committee noted further the support by WWF, in document MEPC 60/6/13, for the proposal by Denmark and co-sponsors. In the document, WWF provided data on voluntary compliance with the Guidelines (MEPC.1/Circ.685) circulated after MEPC 59, by three cruise and ferry shipping companies.

6.8 CLIA, in document MEPC 60/6/14, reiterated its opposition to the proposed amendments and measures, previously expressed at MEPC 59. In the view of CLIA, the proposal would entail, *inter alia*, unfair demands from shipping which would be more stringent than those applied to discharges from land-based sources. At present, inadequacy of port reception facilities for passenger ship-source sewage in the Baltic Sea was a serious obstacle to implementation of any discharge ban in the area.

6.9 The Committee noted information document MEPC 60/INF.22 (CLIA), providing information in support of its position against the establishment of a MARPOL Annex IV Special Area in the Baltic Sea.

6.10 The Committee considered document MEPC 60/6/15 (ICS, CLIA and INTERFERRY), expressing opposition to the proposed amendments on account of the small contribution of shipping to the total nutrients' discharge into the Baltic Sea; that existing technology was unable to comply with the proposed standards for sewage treatment plants on board passenger ships; that no provision was made for Special Area status to take effect only when adequate reception facilities were in place (contrary to current provisions in MARPOL Annexes I and V); and that existing port reception facilities in the area were totally inadequate for passenger ships carrying thousands of people on board.

6.11 The Committee held a debate on the proposal by Denmark and co-sponsors and comments by CLIA, ICS and INTERFERRY.

6.12 The Committee noted that the rationale for the proposal contained the following elements, *inter alia*:

- .1 eutrophication, caused by high inputs of nutrients (nitrogen and phosphorus), is the major threat to the Baltic Sea;
- .2 although nutrient discharges into the sea come mainly from land-based sources, shipping, especially passenger ships, are a cause for concern since they use basically the same routes and the burden of sewage discharges is concentrated in restricted areas;
- .3 the Baltic Sea is quite shallow and, due to the very slow water exchange rate (3% per year) nutrient inputs have a long lasting effect on the entire sea. Ice conditions over winter also add up to this burden;
- .4 an Action Plan for the restoration of the Baltic Sea, approved by the Baltic Sea States in 2007, provides a holistic approach to address eutrophication from both land-based and shipping sources; and
- .5 the proposal to include the concept of Special Areas in the text of MARPOL Annex IV and designate the Baltic Sea as such an Area did not entail a ban on the operation of passenger ships in the Baltic Sea, but rather was aimed at setting up strict standards for the discharge of sewage from those ships, which would, otherwise have the option to deliver their sewage to port reception facilities.

6.13 In the ensuing discussion, many delegations expressed their support for the proposal by Denmark and co-sponsors.

6.14 A number of delegations, while supporting the proposal in principle, expressed concerns on the following grounds:

- .1 the restrictions on the discharge of sewage would apply to passenger ships only, which appeared to be inconsistent with MARPOL regulations that, generally, apply to all ships, or to oil tankers, depending on the scope of specific regulations;

- .2 the more stringent standards concerning nutrient concentration in the effluent, proposed for sewage treatment plants on board passenger ships, posed doubts as to the existence of such equipment for installation on board ships; and
- .3 the proposal lacked the provision (present in other MARPOL Annexes) that the amendments would not enter into force until the concerned Parties had notified the Organization of the existence of adequate port reception facilities with sufficient capacity for accepting large quantities of sewage from passenger ships. Regulation 5(4)(b) of MARPOL Annex V was cited as appropriate text with necessary changes for inclusion in the proposed amendments in that respect.

### **Procedural concerns**

6.15 A number of delegations raised the issue of whether the appropriate procedure had been followed in the submission of the proposal. In their view, the submission should have followed the strict provisions of the Committee's Guidelines (MSC-MEPC.1/Circ.2) concerning proposals for new work programme items, which would be the appropriate way to deal with this matter entailing important and far-reaching amendments to an Annex of MARPOL, since the scope of agenda item 6 would rather be limited to considering those amendments which are necessary to ensure that MARPOL remains with a sure reflection of best practice and the use of appropriate equipment and methodology to ensure its continuing currency.

6.16 Other delegations were of the view that item 6 had been a standing item in the Committee's agenda for a long time, under which many important amendments to MARPOL had been considered and approved in the past and there was no compelling reason for deviating from previous practice in this case.

6.17 Several delegations, in supporting the views of CLIA, ICS and INTERFERRY, expressed disagreement with the proposed amendments. In their opinion, the standards proposed for sewage discharges from passenger ships were not right as they penalized shipping more than land-based industries; the Guidelines for the designation of Special Areas under MARPOL (resolution A.927(22)) should be amended first in order to include MARPOL Annex IV within its scope; and utmost care should be taken not to develop new provisions whose implementation was dependent on technologies (upgraded sewage treatment plants) which currently are not available for marine applications.

**Chairman's summing-up**

6.18 In concluding the debate, the Chairman said that the majority of the Committee had agreed to the proposal to amend MARPOL Annex IV to include the concept of Special Areas; to designate the Baltic Sea as a Special Area; and to impose a strict standard for the discharge of nutrients in the sewage from passenger ships within Special Areas. However, several concerns should be addressed, such as adequacy of port reception facilities for large quantities of sewage from passenger ships in all ports in the area; availability of sewage treatment plants capable of dealing with the strict standards proposed for nutrient content in the effluent; application to passenger ships only; and inclusion of appropriate provisions in the proposed amendments that the taking effect of the discharge requirements within the new Special Area would not occur until the Baltic States had communicated to the Organization the existence of adequate reception facilities.

6.19 The Chairman concluded by indicating that the best way forward at this stage was for the submitters to take into account the above concerns and refine their proposal by submitting a new document to MEPC 61 for approval and subsequent circulation with a view to adoption at MEPC 62.

6.20 The Committee agreed to the summing up by the Chairman.

6.21 On the procedural issue raised by some delegations, the Committee recognized that the inclusion of an open-ended, permanent item in the Committee's agenda dealing with any proposed amendments to MARPOL was a matter that would need further thought, and encouraged delegations to submit their views on this issue to a future session of the Committee.

**Proposed amendments to MARPOL Annexes I and II**

6.22 The Committee considered document MEPC 60/6/4 (Australia and SPREP) proposing amendments to MARPOL Annexes I and II, intended to incorporate in MARPOL the understanding, first reached at MEPC 49, that regional agreements is an acceptable way to satisfy MARPOL obligations to provide reception facilities. In this context, the Committee recalled that, at MEPC 55, it had recognized the benefits of having regional agreements, and it had also invited Members to submit proposals to future sessions of the Committee. MEPC 58 had considered a document by Australia and others (MEPC 58/9) and had agreed that appropriate amendments to relevant MARPOL Annexes should be submitted in order to deal with the issue in an appropriate manner.

6.23 The Committee noted that the United States, in document MEPC 60/6/12, expressed its support for the proposed amendments with the proviso that the Organization should not undertake to approve or disapprove regional agreements as it does not approve reception facilities under any other circumstances and that MARPOL Annexes IV, V and VI should also be amended.

6.24 In the debate that followed, the following points were made:

- .1 the issue of MARPOL Annex II pre-wash requirements at the port of discharge was not adequately addressed in the proposed amendments. In particular, no allowances should be made in respect of one of the strongest requirements in Annex II concerning the obligation to perform pre-wash operations for certain cargoes in the discharge port;
- .2 consideration should be given to the possible need to amend Article 11(d) of the 1973 MARPOL Convention in order to authorize Regional arrangements for port reception facilities;
- .3 regional arrangements should be established only in small island States for which these arrangements had been first considered with a view, *inter alia*, to encourage accession to MARPOL to those States that might have difficulties to provide reception facilities as a fundamental obligation for MARPOL Parties; and
- .4 concerns were expressed on the possible need to deviate from their commercial route for ships to be able to deliver their wastes to port reception facilities forming part of a regional scheme.

6.25 In finalizing the discussion, the Committee, recognizing that there were concerns that should be addressed before the proposed amendments could be approved, endorsed the proposal by the Chairman to encourage interested delegations and observers to resolve the outstanding issues and submit a joint document to MEPC 61 with draft amendments to MARPOL Annexes I, II, IV, V and VI, institutionalizing regional agreements and draft guidelines for establishing those arrangements.

6.26 In addition, the Committee acknowledged that any regional arrangements were intended only for specific regions of the world, especially small island States, and that this understanding should be clearly stated in the draft amendments.

**Proposed amendments to MARPOL Annexes I, II, IV, V and VI**

6.27 The Committee considered document MEPC 60/6/6 (Islamic Republic of Iran), proposing amendments to all regulations concerning port reception facilities in MARPOL Annexes I, II, IV, V and VI in order to impose the obligation to have adequate reception facilities at ship recycling yards.

6.28 In the ensuing debate, many delegations supported the proposal by the Islamic Republic of Iran although it was recognized that it might benefit from its consideration by a specialized body, such as the FSI Sub-Committee or the Committee's own Ship Recycling Working Group.

6.29 In concluding, the Committee agreed to instruct the FSI Sub-Committee to consider the issue under its agenda item on Port reception facilities-related issues, in its forthcoming meeting in July this year, and report to MEPC 61 in September-October when the outcome of FSI 18 could be given further consideration.

**Proposed amendments to MARPOL Annex III**

6.30 The Committee considered document MEPC 60/6/5 (Islamic Republic of Iran), making a case for the need to provide waste reception facilities for goods subject to MARPOL Annex III (Harmful substances in packaged form) which may have been damaged and cannot be returned to the shipper due to safety and environmental considerations. In the view of the submitter, this issue should be addressed properly by inserting an adequate provision in MARPOL Annex III.

6.31 In the debate that followed, several delegations supported the proposal by the Islamic Republic of Iran. It was recognized, however, that the issue might need further consideration since damaged cargoes do not constitute ship's operational wastes *per se*; and relevant provisions in the IMDG Code, or local port regulations, already had provisions covering re-packaging or disposal of damaged harmful substances in packaged form.

6.32 Following an intervention by the Chairman of the DSC Sub-Committee, the Committee concluded that further consideration should be given to the proposal in a specialized subsidiary body and agreed to instruct the DSC Sub-Committee to further consider it under the item on Any other business in its agenda and report to MEPC 62. The Committee also invited the Islamic Republic of Iran to provide further information to the



Sub-Committee including concrete wording concerning the proposed amendment to MARPOL Annex III.

### **Progress report of the Correspondence Group for the review of MARPOL Annex V**

6.33 The Committee considered document MEPC 60/6/1 (New Zealand, as coordinator of the correspondence group) containing a progress report on the review of MARPOL Annex V. The Committee noted that the final report, with proposed amendments to the existing Annex V, would be submitted to MEPC 61 in accordance with the terms of reference agreed at MEPC 59 and that the group had made noticeable progress in identifying existing regulations that do not need amendment; definition of garbage types permitted for discharge; addressing the complex issue of cargo residues including hold wash water; garbage management plans and placards; and waste minimization.

6.34 In the course of the debate, the following views were expressed, *inter alia*:

- .1 on the issue of a possible ban on discharge of hold wash water within Special Areas, it was suggested that the best approach would be to specify those cargoes whose discharge was not allowed. In any case, the criteria set up in document MEPC 55/6/3 (Norway) could be used as guidance;
- .2 regarding the question of vessel length requiring placards (either 10 or 12 metres), there was no conclusive view of the Committee;
- .3 the possible categorization of animal carcasses as garbage, or spoiled cargo, as well as its possible incineration on board for health and safety reasons, spurred a lively debate again without a conclusive view;
- .4 some delegations supported a total ban on the discharge of incinerator ashes while others could not agree to an outright prohibition;
- .5 the term "small amounts" should be understood as those remnants of cargo left on deck and inside the hold after sweeping;
- .6 the discharges of food waste in the Arctic Ocean should be prohibited.

6.35 The delegation of Japan stressed the need to seek pragmatic and feasible solutions for the discharge of garbage from ships. In that respect, the goal of zero discharges was not considered an option however inviting that possibility would appear to be. In order to prohibit all discharges, a thorough research should be conducted to ensure that all ports, terminals

and sea buoys accepted all kinds of garbage. Consideration should be given to the fact that some types of garbage might be quite difficult to keep on board, especially during long voyages due to lack of space or health concerns. Finally, on the issue of lost fishing gear, the delegation highlighted the importance of collaborating with regional fisheries management organizations, or other international bodies, such as FAO.

6.36 Following the debate, the Committee instructed the correspondence group to take into account the comments made at the current session with a view to its final report to MEPC 61 incorporating a draft revised MARPOL Annex V and, in case no agreement could be reached within the group on any contentious issues, to leave those between square brackets for the Committee to decide upon.

6.37 The Committee, noting that document MEPC 60/6/11 (Islamic Republic of Iran) addressed matters currently under discussion within the correspondence group, thanked the delegation for its comments and agreed to request the correspondence group to take them into account in the course of its deliberations.

6.38 FOEI, in document MEPC 60/6/8, reported on the problem of increasing presence of litter in the oceans and, in the context of the review of MARPOL Annex V, requested the Committee to improve Annex V by addressing several issues, *inter alia*: clear rules with robust compliance requirements; clear communication to on board personnel and passengers; making a closed measurable system; total ban on discharge of incinerator ashes; phasing out of onboard incineration of waste; obligation to deliver waste to port reception facilities which should be harmonized worldwide; and improved waste management as a business practice.

6.39 The Committee thanked FOEI for its comments and requested the correspondence group to take them into account in the course of its deliberations.

6.40 Greece, in document MEPC 60/6/9, invited the Committee to note the findings of a survey conducted by HELMEPA on behalf of UNEP/MAP which reported on the worrying state of the Mediterranean Sea as regards marine litter, including plastics and cigarette filters, the latter, together with other smoking-related rubbish, accounting for 40% of total marine litter. Although it would appear that 80% of that litter is from land-based sources, a considerable part of it can be traced to ocean-based activities.

6.41 The Committee thanked Greece for its submission and requested the correspondence group to take it into account in its deliberations.

**Proposed Interim guidelines for recording operations in the Oil Record Book, parts I and II**

6.42 The Committee recalled that at, MEPC 59, the delegation of Denmark had announced its intention to submit draft interim guidelines to be applied in conjunction with the amendments to MARPOL Annex I adopted at that session of the Committee (resolution MEPC.187(59)) and which are expected to come into force on 1 January 2011.

6.43 The Committee recalled also that the amendments to MARPOL Annex I relate to improved, or new, definitions for oil residue (sludge), oil residue (sludge) tank, oily bilge water and oily bilge water holding tank. In addition, regulation 12 on Tanks for oil residue (sludge) was also amended and consequential amendments to the IOPP Certificate Supplement and Oil Record Book were also adopted. The draft interim guidelines are meant to facilitate compliance with the new requirements.

6.44 Denmark, in introducing document MEPC 60/6, stressed that the proposed Interim guidelines are intended to give instructions to ship crews on how to record the various operations in the Oil Record Book by using the correct codes and item numbers in order to ensure a more uniform port State control procedure. The interim guidelines had been developed on the basis of work carried out by the DE Sub-Committee when developing the amendments to MARPOL Annex I that were mainly intended facilitate compliance with its requirements.

6.45 INTERTANKO, in document MEPC 60/6/7, brought the attention of the Committee to its own Guidelines for Correct Entries in the Oil Record Book, Part I, which is widely used by industry and has been constantly updated and improved over the years, taking into account developments at the MEPC. INTERTANKO suggested a series of technical adjustments to the text proposed by Denmark to make it compatible with its own publication.

6.46 The Islamic Republic of Iran, in document MEPC 60/6/10, proposed to add some new language in the General Section of the draft interim guidelines proposed by Denmark to the effect that, in case the Oily Water Separator is not functional, a vessel may still be allowed to depart from a port under the discretion of the port authorities, provided that an exemption is issued by the Administration and next port of call is informed. The Committee, however, did not agree to this proposal.

6.47 Having discussed the issue further, the Committee agreed to the combined text prepared by an informal group of interested delegations, set out in annex ..., and requested the Secretariat to issue the Interim Guidelines as MEPC.1/Circ....

## **7 IMPLEMENTATION OF THE OPRC CONVENTION AND THE OPRC-HNS PROTOCOL AND RELEVANT CONFERENCE RESOLUTIONS**

7.1 The Committee considered five documents under this agenda item as follows: MEPC 60/WP.1, Report of the tenth meeting of the OPRC-HNS Technical Group; MEPC 60/7 (Secretariat), Aerial observation of oil pollution at sea – operational guide; MEPC 60/7/1 (ROPME), Report on implementation of the OPRC Convention in ROPME Member States; MEPC 60/INF.10 (Islamic Republic of Iran), Regional Joint OSR-SAR Exercise in the Caspian Sea; and MEPC 60/INF.13 (Republic of Korea), Construction of an Oil Spill Training Facility by the Korean Government for the implementation of the OPRC Convention.

### **Report of the tenth meeting of the OPRC-HNS Technical Group**

7.2 The Committee noted that the tenth session of the OPRC-HNS Technical Group was held from 15 to 19 March 2010, under the chairmanship of Mr. Nick Quinn (New Zealand), and that the report of the Group was issued under symbol MEPC 60/WP.1.

7.3 The Committee, in considering the report, noted the ongoing concerns expressed by one delegation with regard to the modality of work of the Technical Group and, having noted that this same issue had been raised over the past several sessions, agreed to set aside time at MEPC 61 to discuss the matter.

7.4 In this connection, the Committee requested the Secretariat to prepare a document for MEPC 61, providing the background related to the establishment of the Technical Group, its terms of reference and its modality of operation that would provide a basis for the discussion.

7.5 Having agreed on the way forward, the Committee approved the report in general, and, in particular:

- .1 endorsed the work carried out by the Group in finalizing the draft oil spill waste management decision support tool as international guidance;
- .2 noted that the finalized draft of the revised Manual on oil pollution, Section I – Prevention would be submitted to MEPC 61;

- .3 approved the checklist for new manuals, guidance documents and training materials, set out at annex 1 to the report;
- .4 noted the progress made in the revision of the joint IMO/IPIECA guidance on sensitivity mapping for oil spill response;
- .5 noted that the Manual on Incident Management Systems would be submitted to MEPC 61 for approval;
- .6 noted the progress made on the Manual on chemical pollution to address legal and administrative aspects of HNS and the operational guide on the use of sorbents;
- .7 noted the Group's consideration of ISCO's progress in developing an accreditation scheme for the independent training and accreditation of inland spill response contractors while, at the same time, being aware that ISCO was not seeking the endorsement of the Committee nor the Technical Group for this work;
- .8 noted the format and structure of the web pages, included on the REMPEC website, for hosting the inventory of information resources on OPRC/HNS-related information being developed by the Group;
- .9 concurred with the Group's proposal to include a review of proposed new web page content, as a regular item on the agenda of the Technical Group;
- .10 urged delegations to submit information to further expand the inventory of information resources on OPRC/HNS-related matters;
- .11 concurred with the proposed follow-up actions and outcomes of the Fourth R&D Forum;
- .12 noted the Group's progress in developing Technical guidelines on sunken oil assessment and removal techniques;
- .13 approved the draft work programme and provisional agenda for the eleventh meeting of the OPRC-HNS Technical Group, set out at annexes [x] and [xx], respectively; and

- .14 the scheduling of the eleventh session of the OPRC-HNS Technical Group in the week prior to MEPC 61.

### **Aerial observation of oil pollution at sea – operational guide**

7.6 The Committee recalled that, having considered information on the Bonn Agreement Oil Appearance Code (BAOAC) at MEPC 51, it had instructed the OPRC-HNS Technical Group to review the Code, with a view to its possible adoption as an IMO guideline.

7.7 The Committee recalled also that, having noted the decision of the Bonn Agreement Contracting Parties to collect data on the application of the Code for a period of two years, as reported by the Technical Group to MEPC 52, agreed to place the matter in abeyance, pending the results of the two-year trial.

7.8 The Committee further recalled that, following the outcome of the validation testing, the OPRC-HNS Technical Group, at TG 6, revisited the possibility of adopting the Code as an IMO guideline or code of practice and concluded that there were a number of oil identification manuals and guidance documents available that should also be considered. Having reviewed these, the Technical Group agreed that Centre of Documentation, Research and Experimentation on Accidental Water Pollution's (CEDRE) Aerial observation of oil pollution at sea – operational guide, provided a good basis for the development of international guidance and, further to the approval received by the Committee at MEPC 57, developed the Guide over several sessions, with the final text agreed by the Technical Group at TG 9.

7.9 The Committee, in considering the finalized draft of the Aerial observation of oil pollution at sea – operational guide (MEPC 60/7), approved the text and instructed the Secretariat to work with International Petroleum Industry Environmental Conservation Association (IPIECA) to prepare the document as a joint publication to be included as a new volume in the IMO/IPIECA report series.

### **Report on implementation of the OPRC Convention in ROPME Member States**

7.10 The Committee, in considering document MEPC 59/7/1 (ROPME), noted the activities carried out by MEMAC in ROPME Member States towards the implementation of the OPRC Convention and the strengthening of regional co-operation and encouraged the Secretariat to support the work of the ROPME Member States in identifying and addressing the requirements for the implementation of the OPRC-HNS Protocol.

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**Regional Joint OSR-SAR Exercise in the Caspian Sea**

7.11 The Committee, in considering document MEPC 60/INF.10 (Islamic Republic of Iran), noted the information submitted on a Regional Joint Oil Spill Response – Search and Rescue (OSR-SAR) Exercise in the Caspian Sea, organized by the Islamic Republic of Iran and the Russian Federation, near the Port of Bandar Azali in July 2009.

**Construction of an Oil Spill Training Facility by the Korean Government for the implementation of the OPRC Convention**

7.12 The Committee, in considering the information contained in MEPC 60/INF.13 (Republic of Korea), noted that a new oil spill training facility was being constructed by the Korean Government in Pusan, Republic of Korea, for the effective implementation of the OPRC Convention and to expand the level of oil spill response expertise, with a target completion date of October 2010.

**Development of guidance for coastal States on how to respond to a maritime emergency involving radioactive materials**

7.13 The Committee noted the preliminary information provided by the Secretariat related to a request by the IAEA Secretariat, inviting the IMO Secretariat to collaborate in the preparation of guidance for coastal States on how to respond to a maritime emergency involving radioactive materials.

7.14 The Committee further noted that a meeting to initiate this work had been organized by IAEA in Vienna in early March and that the development of such guidance incorporated both environmental and safety considerations. As such, the Secretariat recognized the need to bring the matter forward to both the MEPC and MSC for further consideration and agreement.

7.15 Given the timing of the request, the Committee noted that a proposal for a new work programme item had been submitted to MSC 87 (MSC 87/24/12) and that, subsequent to this, it was anticipated that the matter would be referred to MEPC 61 for further consideration.

7.15 The observer from ROPME, supported by the delegation of Bahrain, noted the importance of this work and urged the Organization to cooperate with IAEA and other regional systems on the development of this guidance.

## **8 IDENTIFICATION AND PROTECTION OF SPECIAL AREAS AND PARTICULARLY SENSITIVE SEA AREAS**

8.1 The Committee noted that document MEPC 60/8/1 (Bulgaria, Georgia, Romania, the Russian Federation, Turkey and Ukraine), concerning the "Black Sea area" as a Special Area under MARPOL Annex V, had been withdrawn.

### **"Wider Caribbean Region" as a Special Area under MARPOL Annex V**

8.2 The Committee recalled that the "Wider Caribbean Region" was designated as a Special Area under MARPOL Annex V on 4 July 1991 by amendments to the Annex, and entered into force on 4 April 1993. However, the stringent discharge requirements for garbage from ships for the Special Area had not yet taken effect, because adequate port reception facilities had not been provided in all ports within the Special Area.

8.3 The delegation of Panama, on behalf of the States co-sponsoring document MEPC 60/8/2 (Antigua and Barbuda, the Bahamas, Barbados, Belize, Colombia, Cuba, Dominica, France, Guyana, Honduras, Jamaica, Mexico, the Netherlands, Nicaragua, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Trinidad and Tobago, the United States and the Bolivarian Republic of Venezuela), stated that the Special Area status for the "Wider Caribbean Region" (WCR) had not yet come into effect because the WCR Parties to MARPOL Annex V had not notified the Organization that adequate reception facilities were in place in all ports within the Special Area.

8.4 The Panamanian delegation stated also that document MEPC 60/8/2 provided such notification and, consequently, requested the Committee to set the date on which regulation 5(1)(h) of MARPOL Annex V in respect of the "Wider Caribbean Region" as a Special Area shall take effect. To facilitate the work of the Committee on this issue, a draft MEPC resolution was provided in the annex to the above document.

8.5 The observer of INTERCARGO, on behalf of its co-sponsor BIMCO, in introducing document MEPC 60/8/3 on "Comments on MEPC 60/8/2 – The "Wider Caribbean Region" Special Areas under MARPOL Annex V", highlighted that consideration should also be given to revising circular MEPC.1/Circ.675 (concerning cargo hold wash water) to include the "Wider Caribbean Region", in conjunction with any notification of the bringing into effect of the Special Area.



8.6 The delegation of the United Kingdom confirmed its full support, on behalf of its territories in the Wider Caribbean Region, for the submission and considered itself a co-sponsor of document MEPC 60/8/2.

8.7 In the ensuing discussion, the Committee noted that, while three co-sponsoring States (Belize, Jamaica and Nicaragua) did not, at this point in time, have adequate reception facilities in their ports, agreements were in place with neighbouring States such that alternative solutions were available for this waste. In particular, the delegation of Jamaica, as a co-sponsor of document MEPC 60/8/2, gave its assurances that it was working with States within the Wider Caribbean Region to place reception facilities in its ports at the earliest opportunity.

8.8 The Committee, in recognizing that there was general support for the proposal to establish the date on which the discharge requirements for the Wider Caribbean Region Special Area would take effect, agreed that the lack of certain port reception facilities in some States in a Special Area should not form a precedent in future notifications of this kind to the Organization.

8.9 With regard to concerns expressed relating to gaps in information in the GISIS module on reception facilities for garbage in the Region, the Committee decided that this data was neither a legal requirement nor an impediment for the Wider Caribbean Region Special Area to take effect. The Committee noted that this module would be populated at a planned Workshop on MARPOL Annex V in the Wider Caribbean Region, to be held in Panama in May 2010.

8.10 The Committee, having noted that the criteria regarding the provision of adequate reception facilities by States bordering the Wider Caribbean Region Special Area, in accordance with regulation 5(4)(b) of MARPOL Annex V, had been met:

- .1 adopted resolution MEPC....(60), on the establishment of the date on which regulation 5(1)(h) of MARPOL Annex V in respect of the Wider Caribbean Region as a Special Area shall take effect, as set out in annex ... to this report; and
- .2 agreed that the date on which the discharge requirements for the Wider Caribbean Region Special Area should take effect is 1 May 2011.

8.11 The Committee, having considered a proposal by INTERTANKO and BIMCO (MEPC 60/8/3), instructed the Secretariat to prepare and distribute MEPC.1/Circ.675/Rev.1 on Discharge of cargoes hold washing water in the Gulfs Area, Mediterranean Sea Area and the Wider Caribbean Region under MARPOL Annex V, which would serve as an interim solution until the revision of MARPOL Annex V was finalized.

**Amendments to the existing mandatory ship reporting system (WETREP) in the Western European Waters PSSA**

8.12 The Committee recalled that MEPC 59, having noted the information provided by the delegation of Portugal in respect of changes to new Vessel Traffic Services established along the Portuguese Iberian Coast and the adoption of a new Mandatory Ship Reporting System (COPREP) by resolution MSC.278(85):

- .1 approved the amendments to annex 2 of resolution MEPC.121(52) concerning the Western European Waters PSSA, as set out in annex 27 to its report (MEPC 59/24); and
- .2 noted that consequential amendments to the appendix of annex 3 of resolution MEPC.121(52) would be considered by NAV 55, the outcome of which would be reported to MEPC 60 for consideration.

8.13 The Committee noted that NAV 55 had approved a request by the Government of Portugal (NAV 55/3/9) to amend the existing mandatory ship reporting system (WETREP) in the Western European Waters PSSA, as set out in annex 4 to its report (NAV 55/21) and had invited MSC 87 to adopt them in May 2010. The Committee also noted that the amendments to the existing mandatory ship reporting system would be implemented at a date, not less than six months after adoption by MSC 87.

**Further amendments and implementation of new and amended Traffic Separation Schemes and other routing measures near or in the Baltic Sea and the Western European Waters PSSAs**

8.14 The Committee noted that NAV 55 had approved a number of amendments to Traffic Separation Schemes and other routing measures, as contained in annexes 1 and 2 to document NAV 55/21, which would be submitted to MSC 87 for adoption.

8.15 The Committee also noted the action taken by NAV 55 on reporting systems and other routing measures concerning PSSAs and agreed to defer a decision on this matter

until MEPC 61 (27 September to 1 October 2010), after MSC 87's outcome is known (12 to 21 May 2010).

## **9 INADEQUACY OF RECEPTION FACILITIES**

9.1 The Committee recalled that MEPC 55 had approved the Action Plan to tackle the inadequacy of port reception facilities prepared by FSI 14, and had instructed the FSI Sub-Committee to progress the work items described in the Action Plan, with the exception of work item 5.1 "Regulatory matters – Development of Guidelines for establishing regional arrangements for reception facilities", which would be dealt with by the Committee itself.

9.2 The Committee also noted that, since MEPC 59, there had been no further meeting of the FSI Sub-Committee. However, the intersessional correspondence group established by FSI 17 was expected to report the completion of all remaining items of the Action Plan to FSI 18 in July 2010, the outcome of which would be considered by MEPC 61.

9.3 Two submissions (MEPC 60/6/4 and MEPC 60/6/12) were received at this session of the Committee related to work item 5.1 of the Action Plan on regional arrangements for port reception facilities. As these two submissions proposed amendments to the relevant MARPOL Annexes, they were dealt with under agenda item 6 (Interpretations of, and amendments to, MARPOL and related instruments).

9.4 Two further submissions (MEPC 60/6/5 and MEPC 60/6/6), which were relevant to reception facilities, had been received at this session of the Committee, the first proposing the provision of waste reception facilities or damaged cargo rectification sites under MARPOL Annex III, and the second proposing amendments to the MARPOL Annexes for waste reception at ship recycling facilities. These two submissions were also dealt with under agenda item 6.

## **10 REPORTS OF SUB-COMMITTEES**

### **OUTCOME OF DSC 14**

10.1 The Committee recalled that the fourteenth session of the Sub-Committee on Dangerous Goods, Solid Cargoes and Containers (DSC 14) had been held from 21 to 25 September 2009 and that its report was issued under the symbol DSC 14/22.

10.2 The Committee further recalled that MEPC 59, in view of the decision taken for marine pollutants in tanks that the correct technical name need not be shown on the tank as

a supplement to the proper shipping name specified by the IMDG Code, had agreed that amendments to MARPOL Annex III were required. MEPC 59 had, therefore, approved a new work programme item for the DSC Sub-Committee on this point and, specifically, had also instructed the DSC Sub-Committee:

- .1 to revise the criteria defining marine pollutants in MARPOL Annex III so as to bring them in line with the recently revised Globally Harmonized System (GHS) criteria; and
- .2 to revise certain documentation provisions in MARPOL Annex III in order to align them with proposed amendments to SOLAS regulation VII/4.

10.3 The Committee noted that the DSC Sub-Committee, at its fourteenth session, had duly considered these points and developed a revised text for MARPOL Annex III. This text, as set out in annex ..., was approved by the Committee to be circulated by the Secretary-General for subsequent adoption at MEPC 61.

10.4 In considering the draft text of amendments, the Committee endorsed an entry-into-force date of 1 January 2014 for the revised MARPOL Annex III in order to align it with the planned timing of amendments (36-12) to the IMDG Code.

#### **OUTCOME OF BLG 14 AND DE 53**

10.5 The Committee noted that, in view of the proximity of BLG 14 (8-12 February 2010) and DE 53 (22-26 February 2010) to MEPC 60, and given that there were no urgent issues to address, the reports of these two meetings would be considered at MEPC 61.

### **11 WORK OF OTHER BODIES**

11.1 Under this agenda item, the Committee considered the following two documents:

- .1 MEPC 60/11 (Secretariat) – Outcome of the twenty-fifth extraordinary session of the Council (C/ES.25); and
- .2 MEPC 60/11/1 (Secretariat) – Outcome of the twenty-sixth session of the Assembly (A 26).

#### **OUTCOME OF C/ES.25**

11.2 The Committee noted that the twenty-fifth extraordinary session of the Council (C/ES.25) was held on 19 and 20 November 2009 and its summary of decisions was issued

under the symbol C/ES.25/D. The matters of interest to the Committee had been summarized in document MEPC 60/11, including the Council's action on Strategy and planning; Voluntary IMO Member State Audit Scheme; consideration of the report of MEPC 59; and Protection of vital shipping lanes.

11.3 Concerning Strategy and planning, the Committee noted that C/ES.25 had approved the draft Strategic Plan for the Organization (for the six-year period 2010 to 2015); the draft High-level Action Plan of the Organization and priorities for the 2010-2011 biennium; and the draft Guidelines on the application of the Strategic Plan and High-level Action Plan, and had decided to forward them to A 26 for adoption.

11.4 The Committee noted also that, in considering the report of MEPC 59, the Council had noted:

- .1 the adoption of amendments to MARPOL Annex I on oil cargo transfer between oil tankers at sea and onboard management of oil residue (sludge);
- .2 the progress made and decisions taken concerning the control of GHG emissions from ships;
- .3 the approval of the North American Emission Control Area under MARPOL Annex VI, for adoption at MEPC 60, and approval of six guidelines to facilitate implementation of the revised MARPOL Annex VI;
- .4 various BWM Convention-related actions;
- .5 the actions pursuant to the adoption of the 2009 Hong Kong Convention; and
- .6 the action taken concerning the role of the human element.

11.5 The Committee noted further that C/ES.25 had decided to transmit the report of MEPC 59 to A 26 with its comments and recommendations, in accordance with Article 21(b) of the IMO Convention.

11.6 The Committee, having considered the action requested of it by the Council (paragraphs 14.1 and 14.3 of document MEPC 60/11), agreed to contribute to worldwide efforts to address the phenomenon of climate change and global warming.

11.7 The Committee noted the approval by the Council of the intersessional meetings of the OPRC-HNS Technical Group and the ESPH Working Group in 2010.

11.8 Regarding the request of the Council to provide a definition for "harmful substances" concerning Performance Indicator 8(a) for "Tonnes of harmful substances discharged into the sea operationally or accidentally from ships subject to IMO instruments" (paragraph 14.2 of document MEPC 60/11), the Committee, having noted the information provided by the Secretariat on the definition of "Harmful Substances" in the context of the MARPOL Convention, debated the issue as summarized in the ensuing paragraphs.

11.9 The Committee noted, in particular, that Article 2(2) of the 1973 MARPOL Convention defines "Harmful substance" as *"any substance which, if introduced into the sea, is liable to create hazards to human health, to harm living resources and marine life, to damage amenities or to interfere with other legitimate uses of the sea, and includes any substance subject to control by the present Convention"*, while, for the purposes of Assembly resolution A.851(20) on General Principles for Ship Reporting Systems and Ship Reporting Requirements, "Harmful substance" means oil or noxious liquid substances (NLS) in bulk, i.e. substances subject to the requirements of MARPOL Annex I and Annex II.

11.10 The Committee recognized that currently there are no statistical data readily available to calculate Performance Indicator 8(a) as now drafted, given that, although data on accidental oil spills have been available for years and are regularly updated, those pertaining to operational oil discharges and NLS, both accidental and operational, are not easy to find or are not sufficiently accurate to serve the purpose of the Performance Indicator.

11.11 On the issue of operational discharges, the delegation of the Netherlands, supported by Sweden and the observer delegation of CEFIC, stressed that a distinction should be made between legal and illegal operational discharges, as the former are made in compliance with the requirements of MARPOL and, as such, pose no harm to the marine environment. Thus, when calculating Performance Indicator 8(a), only those operational discharges of an illegal nature should be taken into account. The Committee concurred with this view.

11.12 In concluding, the Committee agreed to inform the Council of the result of the discussion and to seek its guidance as to the way forward in respect of this matter.

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**OUTCOME OF A 26**

11.13 The Committee recalled that the twenty-sixth session of the Assembly (A 26) was held from 23 November to 4 December 2009, and that its decisions had been reported in document A 26/6(b)/2. Those matters relevant to the work of the Committee had been reported in document MEPC 60/11/1 (Secretariat).

11.14 The Committee noted that the Assembly had considered the issues arising from the last three sessions of the Committee (fifty-seventh, fifty-eighth and fifty-ninth) which had been brought to its attention, and that the Assembly had noted, *inter alia*, the following main decisions and actions of the Committee during the biennium under review:

- .1 the progress made in taking follow-up actions to resolution A.963(23) on IMO policies and practices related to reduction of greenhouse gas emissions from ships; and that MEPC 59 had developed the technical and operational guidelines regarding the Energy Efficiency Design Index, Energy Efficiency Management Plan and Energy Efficiency Operational Indicator and had agreed to circulate them for trial purposes, or for voluntary implementation, by ships engaged in international trade;
- .2 that the Committee had adopted a revised MARPOL Annex VI and NO<sub>x</sub> Technical Code (both of which are expected to enter into force on 1 July 2010) and had approved or updated a number of MEPC circulars and guidelines to facilitate their implementation;
- .3 the ongoing work concerning the BWM Convention, including completion of the task to develop 14 sets of guidelines for its uniform implementation; that basic or final approval had been granted to 17 ballast water management systems as a whole; and that MEPC 59, having reviewed the issue, had concluded that there would be sufficient type-approved ballast water treatment technologies for ships constructed in 2010;
- .4 that, following the adoption of the International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009 (Hong Kong Convention), MEPC 59 had adopted a method for calculation of recycling capacity for meeting the entry-into-force conditions of the Convention and the Guidelines for the development of the inventory of hazardous materials; and

- .5 the designation of the Papahānaumokuākea Marine National Monument (Hawaii Islands) as a PSSA; and the establishment of the date of 1 May 2009 for the Mediterranean Sea Special Area under MARPOL Annex V to take effect.

### **Resolutions adopted by the Assembly**

11.15 The Committee noted that A 26 had adopted the following resolutions which had been prepared and approved jointly by the MSC and the MEPC:

- .1 resolution A.1019(26) – Amendments to the Code for the implementation of mandatory IMO instruments, 2007;
- .2 resolution A.1020(26) – Amendments to the Survey Guidelines under the Harmonized System of Survey and Certification, 2007;
- .3 resolution A.1021(26) – Code on alerts and indicators, 2009;
- .4 resolution A.1022(26) – Guidelines on the implementation of the ISM Code by Administrations; and
- .5 resolution A.1024(26) – Guidelines for ships operating in polar waters.

### **Strategy and Planning**

11.16 The Committee noted also that, in the context of Strategy and Planning, A 26 had adopted:

- .1 resolution A.1011(26) – Strategic Plan for the Organization (for the six-year period 2010-2015);
- .2 resolution A.1012(26) – High-level Action Plan of the Organization and priorities for the 2010-2011 biennium; and
- .3 resolution A.1013(26) – Guidelines on the application of the Strategic Plan and High-level Action Plan of the Organization.

### **Action taken by the Committee**

11.17 The Committee, having considered the action requested of it in paragraphs 31.1 to 31.3 of document MEPC 60/11/1:



- .1 noted the approval by the Assembly of the reports of the Committee on its fifty-seventh, fifty-eighth and fifty-ninth sessions, as presented in document A 26/12;
- .2 noted the requests by the Assembly of the Committee, as contained in resolutions A.1019(26), A.1020(26), A.1021(26), A.1022(26) and A.1024(26); and
- .3 noted the requests by the Assembly of the Committee, as contained in resolutions A.1012(26) – High-level Action Plan of the Organization and priorities for the 2010-2011 biennium; and A.1013(26) – Guidelines on the application of the Strategic Plan and High-level Action Plan of the Organization.

11.18 In addition, in respect of the action requested of it by the Assembly in paragraphs 31.4 and 31.5 of document MEPC 60/11/1, the Committee agreed to instruct the FSI Sub-Committee to:

- .1 consider in detail the consolidated audit summary report contained in document A 26/9/1;
- .2 consider how to make the Code for implementation of mandatory IMO instruments mandatory, including provisions for auditing; and
- .3 report to MEPC 61 for further consideration by the Committee in connection with the "Timeframe and schedule of activities to institutionalize the IMO Member State Audit Scheme" annexed to resolution A.1018(26), so that the Committee can report to the Council and the Assembly, in due course, on the outcome of its consideration.

## **12 STATUS OF CONVENTIONS**

12.1 The Committee noted the information on the status of IMO conventions and other instruments relating to marine environment protection at 15 December 2009 (MEPC 60/12) as follows:

- .1 Annex 1 shows the status of the IMO conventions and other instruments relating to marine environment protection;

- .2 Annex 2 shows the status of MARPOL;
- .3 Annex 3 shows the status of the amendments to MARPOL;
- .4 Annex 4 shows the status of the 1990 OPRC Convention;
- .5 Annex 5 shows the status of the 2000 OPRC-HNS Protocol;
- .6 Annex 6 shows the status of the 2001 AFS Convention; and
- .7 Annex 7 shows the status of the 2004 BWM Convention.

12.2 The Committee also noted the following information provided by the Secretariat since document MEPC 60/12 was issued on 15 December 2009:

- .1 with regard to annex 2 on the status of the MARPOL Convention:
  - .1 Brazil deposited its instrument of accession to MARPOL Annex VI on 23 February 2010.
- .2 with regard to annex 4 on the status of 1990 OPRC Convention:
  - .1 Benin deposited its instrument of accession on 5 February 2010;
- .3 with regard to annex 6 on the status of 2001 AFS Convention:
  - .1 Singapore deposited its instrument of accession on 31 December 2009; and
- .4 with regard to annex 7 on the status of 2004 BWM Convention:
  - .1 the Cook Islands deposited its instrument of accession on 2 February 2010.

### **13 HARMFUL ANTI-FOULING SYSTEMS FOR SHIPS**

13.1 Having considered document MEPC 60/13 (IPPIC) on the generation of biocide leaching rate estimates for anti-fouling coatings and their use in the development of proposals to amend Annex 1 of the AFS Convention, the Committee noted the information on methods for determination of biocides leaching rates from anti-fouling systems and, in particular, the suggested mass-balance calculation method with suitable conservative default correction factors.

13.2 In this context, the Committee also noted the information that, since the entry into force of the AFS Convention, anti-fouling systems containing organotin compounds acting as biocides had been removed from the market and replaced with effective alternative anti-fouling systems by members of IPPIC, which produce over 90% of the world's anti-fouling paints.

#### **14 PROMOTION OF IMPLEMENTATION AND ENFORCEMENT OF MARPOL AND RELATED INSTRUMENTS**

14.1 The Committee noted document MEPC 60/INF.3 submitted by ROPME/MEMAC, providing information on the activities carried out in the ROPME Sea Area (Gulfs area) by MEMAC in conjunction with ROPME Member States.

14.2 The Committee noted, in particular, that, in the context of monitoring and surveillance, the ROPME Satellite Receiving Station had intensified its monitoring and that MEMAC had installed a number of AIS stations on the Member States' coasts covering all the ROPME Sea Area in order to integrate the information with the satellite images. It had been noted through the monitoring and surveillance systems that some ships commit violations by illegally discharging ballast water and oily waste and, therefore, ROPME had urged Member States to revise their legal systems concerning prosecution procedures and penalty amounts.

14.3 The Committee noted also that, due to increasing oil and gas production, building or expanding ports and desalination plants and other activities, the Region had witnessed a rapid increase in shipping traffic. Thus, ship port calls in 2005 were 32,000 and, in 2009, the number passed 69,000. Accordingly, MEMAC had conducted a four-year study to identify the high-risk areas within the Region which indicated that the Region's Sea Area is a fragile marine environment and high consideration must be given to the necessary steps that need to be taken towards attaining PSSA status.

14.4 On the issue of training, the Committee noted further that several programmes and workshops were convened during the years 2008 and 2009, in cooperation with several external experts, focusing, *inter alia*, on implementation of port State control and the exchange of experiences. A training workshop on oil tanker, LPG, LNG and chemical ships safety and "MARPOL: How to do it" was also held in 2009.

14.5 The Committee congratulated the ROPME Sea Area countries for their unremitting activities concerning the protection of the marine environment in the area.

**15 TECHNICAL CO-OPERATION SUB-PROGRAMME FOR THE PROTECTION OF THE MARINE ENVIRONMENT**

15.1 The Committee recalled that, given the importance of technical co-operation in the work of the Organization, updates on TC activities were prepared for the attention of the Committee at each session.

15.2 The Committee noted the status report on the activities under the 2008-2009 ITCP related to the protection of the marine environment and undertaken during the biennium, including major projects, which are under the direct supervision of the Marine Environment Division (MED) of the Organization (MEPC 60/15, annexes 1 and 2; MEPC 60/15/Add.1, annex; MEPC 60/15/1; MEPC 60/15/2; MEPC 60/15/3 and MEPC 60/15/4).

15.3 The Committee further noted the considerable work carried out and the significant results achieved under the ITCP, including the major projects funded by external sources, as follows:

- .1 the principal achievements under the ITCP pertained to the training of officials through seminar/workshops/training courses on marine environment protection, in particular, OPRC and MARPOL; promotion and enhancement of regional cooperation through the development of regional actions such as strategic action plans for the implementation of OPRC and MARPOL; regional contingency plans for combating accidental marine pollution; environmental waste management guidelines for port operation; and regional ballast water management strategies and plans, among others. The Committee noted that 93% of the activities originally planned under the ITCP for 2008-2009 were successfully implemented and, likewise, some 23 *ad hoc* activities were also implemented following specific requests from Member States;
- .2 with respect to the OPRC Convention 1990, the Organization continued its fruitful cooperation with the oil and shipping industries and, in particular, under the framework of the IMO/Oil Industry Global Initiative (GI), such as the IMO-Industry funded GI Project for the West and Central Africa; and
- .3 with regard to the ongoing work of the Organization for the development of the project concept to build capacity in developing countries to address greenhouse gas emissions (GHG) from ships, the Committee was informed that further progress was made in the form of a preliminary project concept

paper developed by the Marine Environment Division and shared with the European Commission (EC). Crucial for the commitment of the EC to provide support is the expression of interest by countries which could be beneficiaries to express their support for this capacity-building initiative on GHGs. The Committee noted that, at present, five expressions of interest had been received by the Secretariat from IMO Member States who might benefit from the project.

15.4 The Director, Technical Co-operation Division of the Organization, provided additional information on the ITCP. The Committee noted the importance of effective implementation and enforcement of IMO international standards and recalled that the ITCP was established as a means to assist countries in building their human and institutional capacities and thereby contribute to the Organization's efforts for a uniform and global implementation and enforcement of such international standards. The role of the ITCP as a catalyst for sustainable maritime development, efficient and safe maritime transport services and effective marine environment protection was also stressed.

15.5 The Committee also noted the information provided on the development and delivery of the ITCP as follows:

- .1 the programme is based on identified regional needs and thematic priorities established by the relevant IMO Committees and on donor priorities;
- .2 since MEPC 57, over one hundred marine environment-related activities have been developed and implemented through the joint efforts of the Marine Environment Division (MED), TCD, the IMO regional presence offices in Africa, Asia and the Caribbean and the IMO technical co-operation partners. A delivery rate of 97% of the ITCP for 2008-2009 was achieved with a further 70 *ad hoc* activities implemented at the request of the IMO Member States;
- .3 the new ITCP for 2010-2011, comprising 14 programmes, was approved by the fifty-ninth session of the Technical Co-operation Committee (TCC), one thematic priority of which relates to capacity building for uniform application of IMO's policy on greenhouse gas emissions. More than 50% of the allocated funding for the new ITCP is earmarked for activities related to the protection of the marine environment; and

- .4 following the adoption by the IMO Assembly at its twenty-fifth session of resolution A.1006(25) on the "linkage between the ITCP and the Millennium Development Goals (MDGs)", the new ITCP made provision for the implementation of MDG 7 – Ensure environmental sustainability.

15.6 The Committee noted the generous offer by the Norwegian Development Cooperation Agency (NORAD) of approximately US\$3 million for IMO's technical co-operation programme focusing on marine environment-related activities. The contribution by NORAD was seen as a reflection of NORAD's confidence in IMO's and, in particular, MED's ability to develop and manage large-scale projects related to the protection of the marine environment.

15.7 The Committee also noted the special measures put in place by the Secretariat aimed at expanding the pool of experts for the implementation of the ITCP through the setting-up of a roster for graduates of the World Maritime University (WMU) and of the International Maritime Law Institute (IMLI).

15.8 The Committee further noted the results of the third Impact Assessment Exercise (IAE) covering activities implemented during the period from 2004 to 2007, which corroborated the fact that the ITCP is an efficient tool for the strengthening of global maritime competencies.

15.9 The Director of the Organization's Marine Environment Division expressed his appreciation of the excellent cooperation between the two divisions, which made it possible to attain such a high delivery rate of the technical co-operation activities.

15.10 The Committee also noted the information on the considerable work carried out and the important results achieved under the three major projects being currently implemented by the Marine Environment Division, as follows:

- .1 under the Marine Electronic Highway Project, a hydrographic survey is being currently conducted at the upper part of the Traffic Separation Scheme (TSS), around One Fathom Bank in the Straits of Malacca and Singapore covering an area of 621.3 square kilometres, representing 14.38% of the total TSS area. The multibeam sonar survey commenced on 9 February 2010 by a private contractor (GEMS Survey Limited) in close collaboration with the littoral States of Indonesia, Malaysia and Singapore.

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The Committee noted that the planned completion date for the field survey is now set for the end of March 2010;

- .2 with regard to the SAFEMED Project, the main objective of which is to mitigate the existing imbalance in the application of maritime legislation in the Mediterranean region between the EU and non-EU Mediterranean partners, the Committee noted that, following an extension of six months, the project was concluded on 30 June 2009 and all its tasks were successfully implemented. In view of the achievements of the SAFEMED Project, referred to as "SAFEMED I", the European Commission and the Mediterranean partners agreed to launch a second EU-financed MEDA regional SAFEMED Project (SAFEMED II), which builds upon the work carried out through SAFEMED I, introducing new elements such as cooperation on PSC and procurement of VTMS equipment, etc. The Committee expressed appreciation to REMPEC for their efforts in successfully implementing the two projects under the administrative oversight and technical backstopping from the Secretariat; and
- .3 under the GEF/UNDP/IMO GloBallast Partnerships, several major technical cooperation activities were undertaken during the period under review. The Project builds on the very successful GloBallast Pilot Project and aims to assist participating developing countries to enact, through effective partnerships, the necessary policy, legal and institutional reforms, and to build technical and institutional capacity to implement the Ballast Water Management Convention. The Project was commissioned in January 2008 and all the GloBallast Regions and several Lead Partnering Countries of the Project have achieved significant progress in implementing the project activities. A significant achievement under the Project has been the formation of the "Global Industry Alliance (GIA) for Marine Biosecurity" within the GloBallast Project framework, including the establishment of a GIA Fund. This groundbreaking public-private sector partnership, facilitated through the Project, has seen the maritime industry, including shipowners and shipbuilders, joining hands as founding partners of such an Alliance. It is expected that this pioneering global partnership will accelerate innovative solutions to help address ballast water issues. So far, five major activities have been implemented in the first year of GIA and these included a Global Research and Development Forum and

workshops on Emerging Ballast Water management systems and the development of a Country-Profile database as a one-stop access for information on ballast water management requirements and arrangements in different countries.

15.11 Several delegations expressed their appreciation for the support they had received from IMO and their technical co-operation partners. In this connection, the delegation of Israel expressed its appreciation for the role and leadership of the Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC) in the implementation of the SAFEMED Project, and thanked the EC for their substantial support.

15.12 The Chairman of the Technical Co-operation Committee (TCC) expressed his appreciation for the work of the Secretariat in the execution of the TCC decisions and, in particular, for the high percentage of delivery of the ITCP. He extended his thanks to the EC for their commitment and contribution to the ITCP and appealed to other donors to come forward.

15.13 The delegation of Nigeria expressed its appreciation for the untiring efforts being made by MED and TCD for the attainment of the ITCP objectives. It further stressed the important role the graduates from WMU and IMLI could play in the delivery of the ITCP activities.

15.14 The delegation of Singapore thanked IMO for their support to the beneficiaries of the Marine Electronic Highway Project in the Straits of Malacca and Singapore, aimed at achieving progress in the implementation of the Project.

15.15 The Committee noted the work undertaken by the Secretariat for the updating of the IMO publication "MARPOL – How to do it" as a result of extensive revisions of MARPOL Annexes I and II and the entering into force of Annexes IV and VI. The Committee expressed appreciation to the Netherlands Government for financing the update and instructed the Secretariat to publish the new edition as soon as possible.

15.16 In summing up, the Chairman recalled that the constituent programmes of the 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 financial and in-kind contributions to the ITCP 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 can be achieved.



## 16 ROLE OF THE HUMAN ELEMENT

16.1 The Committee recalled that the Joint MSC/MEPC Working Group on Human Element met at MEPC 59 and finalized the Guidelines on the implementation of the ISM Code by Administrations, which was subsequently adopted by resolution A.1022(26).

16.2 The Committee noted that the Joint MSC/MEPC Working Group on Human Element is scheduled to be reconvened during MSC 88 in December 2010.

16.3 The Committee considered document MEPC 60/16 (BIMCO, ICS, IFSMA, P & I CLUBS, INTERCARGO, InterManager, INTERTANKO, ISF, ITF, IUMI & SIGTTO) which highlighted, from a technical perspective, the view of the co-sponsors that the officers of the **M/T Hebei Spirit** acted in accordance with the applicable guidelines and customary practice in the tanker industry. It was also the joint view of the co-sponsors that, if any doubt is allowed to continue as to the merit of these actions, then there would be considerable and serious uncertainty within the industry. In addition to these important technical concerns, the guilty verdict made by the Korean Supreme Court raised, in the opinion of the co-sponsors, broader issues relating to the international rules and regulations under UNCLOS and MARPOL which also require serious consideration. Accordingly, the co-sponsors will submit a further document to IMO's Legal Committee, commenting on these issues and the wider issue of fair treatment of seafarers when acting in accordance with standards agreed by the industry and Governments and contained in guidelines adopted under the auspices of IMO.

16.4 The delegation of the Republic of Korea expressed its appreciation for the effort that the master and chief officer of the **Hebei Spirit** made to avoid the collision and minimize the pollution from the ship after the incident, and informed the Committee that they fully understood the concerns raised by various industry organizations. The delegation further informed the Committee that the Korean Court acted in accordance with the Korean Penal Code, under which erroneous acts could be punishable and that the Korean Supreme Court has final jurisdiction on the matter. The delegation also requested Members Governments and international organizations to respect the decision of the Korean Court and to keep the discussion, within the Organization, focusing on the technical measures to prevent and combat pollution incidents, with a view to minimizing the occurrence of similar events in the future.

16.5 The observer from InterManager expressed concerns on similar cases of criminalization of seafarers which could have an adverse impact on the recruitment of young

persons for a career at sea. This, in their opinion, was an important issue in the light of the forthcoming Diplomatic Conference of STCW Parties which would consider adopting a resolution relating to attracting new entrants to, and retaining seafarers in, the maritime profession.

16.6 After discussion, the Committee agreed to refer the document to the FSI Sub-Committee for further consideration under its agenda item on Casualty statistics and Investigation.

## **17 FORMAL SAFETY ASSESSMENT**

17.1 The Committee recalled that MEPC 56 had noted that the one matter that needed consideration within the context of the Formal Safety Assessment Guidelines relevant to its work was the development of environmental risk evaluation criteria. In this connection, it recognized the need to carry out a more in-depth analysis of the proposed environmental risk evaluation criteria for the purpose of the Formal Safety Assessment (FSA) before inclusion of such criteria in the IMO FSA Guidelines (MSC/Circ.1023-MEPC/Circ.392, as consolidated in MSC 83/INF.2).

17.2 The Committee also recalled that MEPC 56 had recognized that there was limited experience in the practical application of environmental risk evaluation criteria. Noting that more work, including more research, was needed on the subject, the Committee had agreed to establish a correspondence group, under the coordination of Greece, to address the issues related to the following key criteria: Severity Index (SI) in the Hazid step; the costs of averting a spill (CATS); the ALARP region; and the F-N diagram.

17.3 The Committee further recalled that the work of the Correspondence Group under the coordination of Greece had continued in the intersessional periods between successive sessions of the MEPC 56, 57, 58 and 59. MEPC 59, noting that more work was needed on the subject, agreed to retain this agenda item and to establish a Working Group on Environmental Risk Evaluation Criteria at this session and, at the same time, re-established the Correspondence Group under the coordination of Greece\* to further progress the work and report back to MEPC 60.

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17.4 The Committee noted that, following MSC 85's decision, an FSA Experts Group (MSC FSA GoE) was established, coordinated by Japan, to examine a number of FSA studies. The MSC FSA GoE, which met intersessionally from 2 to 6 November 2009, had continued to work by correspondence and had requested MSC 87 that a meeting of the Group be held at that session in order for it to complete its work, including the review of the FSA study on dangerous goods on board open-top containerships.

17.5 The Committee noted that four documents had been submitted under this agenda item: MEPC 60/17 (Greece), which contained the report of the Correspondence Group on Environmental Risk Evaluation Criteria; MEPC 60/17/1 (Norway), which contained information on the costs of oil spills in Norwegian territorial waters; and a proposal for environmental risk criteria; MEPC 60/17/2 and MEPC 60/17/3 (both submitted by Japan), which provided comments on the report of the correspondence group concerning the assurance factor and severity index (MEPC 60/17/2) and the ALARP region and the F-T diagram (MEPC 60/17/3).

17.6 The Chairman of the Correspondence Group, when reporting on the work undertaken in the intersessional period, informed the Committee that substantial progress had been accomplished by successive correspondence groups since MEPC 56 in terms of identifying the most important issues on the topic. In summarizing the progress made, he pointed out that:

- .1 consensus had been reached that environmental risk evaluation criteria should be expressed on a cost per volume of spilled oil basis. A volume-dependent non-linear scale or function of a global CATS threshold would be preferable to a single CATS threshold, and there seemed to be further convergence on the form of the non-linear function of total spill cost versus volume. The work conducted independently by three members of the correspondence group resulted in very similar functions, which might form the basis for further discussion. However, there was some concern among two members of the correspondence group that the IOPCF data used to generate the CATS value may not be appropriate, resulting in a low CATS value;
- .2 apparent agreement had also been reached on the frequency matrix in the Hazid step, which was being proposed to be the same as in the safety FSA;
- .3 consensus had been achieved on the issues pertaining to the collection and reporting of relevant data; and

- .4 draft TORs were developed for the working group for consideration by the Committee when establishing the Working Group.

### **Establishment of the Working Group on Environmental Risk Evaluation Criteria**

17.7 The Committee agreed to establish the Working Group on Environmental Risk Evaluation Criteria under the Chairmanship of Professor Harilaos N. Psaraftis (Greece), with the following Terms of Reference:

"Using documents MEPC 60/17, MEPC 60/17/1, MEPC 60/17/2 and MEPC 60/17/3 as the basis and any other relevant information, as well as taking into account the comments made in plenary, the Working Group was instructed to:

- .1 recommend in Step 4 of the FSA an appropriate volume-dependent CATS global threshold scale or function for ascertaining if a specific Risk Control Option (RCO) is cost-effective, including its integration within the FSA methodology;
- .2 recommend a way of combining environmental and safety criteria for those RCOs that affect both environmental and fatality risk;
- .3 conclude on an appropriate risk matrix or index for environmental criteria;
- .4 recommend an appropriate ALARP region and F-N diagram, including an appropriate value for the slope of the F-N curve;
- .5 address the issue of collection and reporting of relevant data; and
- .6 submit a written report to plenary for consideration on Thursday, 25 March 2010."

### **Report of the Working Group on Environmental Risk Evaluation Criteria**

17.8 The Committee considered and approved the report of the Working Group (MEPC 60/WP.11) in general and, in particular:

- [.1 noted the progress made in determining a CATS criterion;
- .2 urged Member Governments/organizations to verify and adjust as necessary the proposed regression formula and to submit the data for each

cost component and the results of the analysis for consideration by the Committee;

- .3 invited Member Governments and interested organizations to use the non-linear cost function in FSA studies with a view to gain experience with its application and provide information to the Organization which may help to improve the proposed functions;
- .4 noted the options proposed for environmental and safety criteria for those RCOs that affect both environmental and safety risk;
- .5 endorsed the Group's view on using the Frequency Matrix already in use for the safety FSA methodology;
- .6 noted the progress made in determining the appropriate severity and risk indices as well as an ALARP region and F-N diagram;
- .7 endorsed the Group's view that the severity index needs to be consistent with the CATS function;
- .8 endorsed the Group's views on the collection and reporting of relevant data for environmental FSAs; and
- .9 endorsed the Group's request regarding the proposed arrangements in order to complete the methodology, including the establishment of a working group at MEPC 62.

17.9 With regard to paragraph 17.8.9, the delegation of Denmark drew the attention of the Committee that this implied that the deadline for completing the work on determining appropriate environmental risk evaluation criteria was extended to 2011 (see paragraph 38 of document MEPC 60/WP.11). It noted that an FSA study on oil tankers, supported by the European Union project, SAFEDOR, had been submitted to MEPC 58 (MEPC 58/17/2 and MEPC 58/INF.2), and its evaluation has remained pending, awaiting the development of the CATS criterion. It further noted that, had the FSA Working Group reached a conclusion at this session on the CATS, the evaluation of the study could have taken place allowing the Organization to derive benefit from the results of the study and initiate further discussions on possible proactive viable risk control options. With an extension of the target completion date for determining a suitable CATS criterion, the review of the study would be postponed further. The delegation, therefore, proposed to refer this FSA study to the MSC FSA Experts

Group, with the view that this group review the methodology and data related to the first three steps of the FSA guidelines, but await the development of the CATS criteria before reviewing the final recommendations.

17.10 The Committee having considered the proposal, agreed ...]

[more to come]

## **18 NOISE FROM COMMERCIAL SHIPPING AND ITS ADVERSE IMPACTS ON MARINE LIFE**

18.1 The Committee recalled that MEPC 58, having approved the inclusion of a new high-priority item in its work programme on "Noise from commercial shipping and its adverse impact on marine life" with a target completion date of three or four sessions, established an intersessional Correspondence Group, coordinated by United States, and instructed it to:

"identify and address ways to minimize the introduction of incidental noise into the marine environment from commercial shipping to reduce the potential adverse impact on marine life and, in particular, develop voluntary technical guidelines for ship-quieting technologies as well as potential navigation and operational practices" (MEPC 58/23, paragraph 19.6)."

18.2 The Committee also recalled that MEPC 59, having considered the first report of the Correspondence Group and comments thereon, agreed to re-establish the Correspondence Group to continue its work along the lines of its terms of reference agreed at MEPC 58, taking into account the relevant work done by MSC (MSC/Circ.1014), which addresses the adverse impact of noise on the crew and passengers, and to provide a written report to MEPC 60.

18.3 The Committee had before it document MEPC 60/18 (Report of the Correspondence Group) and noted that the work conducted during the intersessional period had focused on technological issues which are set out in annex 1 (cavitation, machinery and hulls) and annex 2 (dominant frequency and IMO-related issues of the said document). Several questions and proposals had been posed in both annexes and input on these issues would be needed to progress the work.

18.4 The Committee also noted that the Correspondence Group concentrated its efforts on the major element of cavitation and that the other aspects of incidental underwater noise generated from shipping would be retained for future reference.

18.5 With regard to the issue of a regulatory framework, the Committee noted that there were other entities working on regional legislation for various types of noise. Given that the Correspondence Group's terms of reference were confined to the work on **non-mandatory technical guidelines** for ship-quieting technologies as well as potential navigation and operational practices, no further work had been conducted on this matter.

18.6 The Committee noted that the work on standards for underwater noise was contained in annex 3 and that research needs were contained in annex 4 to document MEPC 60/18.

18.7 The Committee also noted that, in an attempt to obtain additional input from those entities that may have useful information on the issue of noise reduction, feedback from national shipowners suggested that, while some larger shipping companies have an impact on how a ship is designed and built, most buy ships that have already been built or on which construction has already begun. Therefore, shipowners would, in many instances, not have an impact on noise-reduction measures since the vessel design stage had already been completed. It was suggested that perhaps shipyards may have more input at the ship design stage.

18.8 The Committee further noted that the Correspondence Group had approached a number of model basins. These basins generally carried out hydrodynamic tests in tanks to test ship models for the purpose of designing a new, full-sized ship or refining the design of a ship to improve the ship's performance at sea. Annex 5 to document MEPC 60/18 contained a listing of the model basins that were approached and a summary of the responses received.

18.9 In the ensuing discussion, the Committee noted that there was general support for the current direction of the work being undertaken by the Correspondence Group and, in particular, its focus on non-mandatory technical guidelines for ship-quieting technologies as well as potential navigation and operational practices.

18.10 The Committee agreed that the Correspondence Group should concentrate its efforts on the major element of cavitation as this would lead to other efficiencies, consequential fuel savings and reduction of emissions. The Committee also encouraged that research on the issue of underwater noise should be conducted simultaneously with the work of the Correspondence Group.

18.11 The Committee, with a view to progressing the matter further, agreed to re-establish the Correspondence Group, under the leadership of the United States, and instructed it to:

- .1 continue its work along the lines of the terms of reference approved by MEPC 58, taking into account comments and other input received at and after MEPC 60; and
- .2 submit a further report to MEPC 61.

18.12 The Chairman, together with all delegations represented at MEPC 60, expressed their sincere appreciation to Ms. Lindy Johnson (United States) for her significant contributions to the work of the Committee over many years, including her role as coordinator of the Correspondence Group and lead author of the report and, noting that she was unable to attend this session due to health reasons, wished her a full recovery.

## **19 WORK PROGRAMME FOR THE COMMITTEE AND SUBSIDIARY BODIES**

### **Revision of the Guidelines for the transport and handling of limited amounts of hazardous and noxious liquid substances in bulk in offshore support vessels**

19.1 The Committee noted a proposal by Brazil, Denmark, Norway, and IACS (MEPC 60/19) to revise the Guidelines for the transport and handling of limited amounts of hazardous and noxious liquid substances in bulk in offshore support vessels – resolution A.673(16), as amended, to be coordinated by the BLG Sub-Committee with a target completion date of 2012.

19.2 In accordance with paragraph 2.20 of the Committees' Guidelines (MSC-MEPC.1/Circ.2), the Chairman made a preliminary assessment (MEPC 60/WP.3, annex 1) on the proposed unplanned output by the co-sponsors. The Chairman's assessment showed that the criteria for general acceptance provided in paragraph 2.10 of the Committees' Guidelines had been met.

[19.3 The Committee, having considered the proposal, approved the inclusion of an unplanned output in the biennial agenda of the BLG Sub-Committee on "Development of a Code for the transport and handling of limited amounts of hazardous and noxious liquid substances in bulk in offshore support vessels", seeking technical advice from the DE Sub-Committee as necessary, with a target completion date of 2012.]



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**Proposal for a new item on standardization of Oil Protection Combating Equipment**

19.4 The Committee noted a proposal by the Islamic Republic of Iran (MEPC 60/19/1) to develop guidelines addressing the safe performance of oil pollution combating equipment and their inclusion as an unplanned output in the biennial agenda of the OPRC-HNS Technical Group.

19.5 In accordance with paragraph 2.20 of the Committees' Guidelines (MSC-MEPC.1/Circ.2), the Chairman made a preliminary assessment (MEPC 60/WP.2, annex 2) on the proposed unplanned output by the Islamic Republic of Iran.

[19.6 The Committee, having considered the proposal, approved the inclusion of an unplanned output in the biennial agenda of the OPRC-HNS Technical Group on "Development of guidance on the safe operation and performance standards of oil pollution combating equipment", and requested the Technical Group to seek technical advice from the DE Sub-Committee, as appropriate, with a target completion date of 2011.]

**Status of planned outputs of the Committee for the 2010-2011 biennium**

19.7 The Committee noted that, as requested by paragraph 9.1 of the annex to resolution A.1013(26) – Guidelines on application of the Strategic Plan and the High-level Action Plan of the Organization, reports on the status of planned outputs for the 2010-2011 biennium should be annexed, in tabular format, to the report of each session of the Committees and the sub-committees. Such reports should separately identify unplanned outputs accepted for inclusion and should consolidate all reports on the status of planned outputs received since the previous report of the respective organ.

19.8 Having considered document MEPC 60/WP.4 on the status of the planned outputs of the Committee for the 2010-2011 biennium, reproducing the items listed in resolution A.1012(26) relating to the work of the Committee and relevant sub-committees, the Committee endorsed the status of planned outputs for the current biennium, which would be updated by the Secretariat to take into account the outcome of MEPC 60, as set out in annex ....

**Items to be included in the Committee's agenda for its forthcoming three sessions**

19.9 The Committee approved the items to be included in the agendas for MEPC 61, MEPC 62 and MEPC 63 (MEPC 60/WP.2), as set out in annex ....

**Dates for MEPC 61, MEPC 62 and MEPC 63**

19.10 The Committee noted that MEPC 61 would be held from 27 September to 1 October 2010 and that MEPC 62 and MEPC 63 were tentatively scheduled to be held in July 2011 and March 2012, respectively.

**Working/review/drafting groups at MEPC 61**

19.11 The Committee agreed, in principle, to establish the following working/review/drafting groups at MEPC 61:

- [.1 Working Group on Energy Efficiency Measures for Ships;
- .2 Working Group on Ship Recycling;
- .3 Review Group on Ballast Water Technologies; and
- .4 Drafting Group on Amendments to Mandatory Instruments.]

**Correspondence Groups**

19.12 The Committee agreed to establish the following intersessional correspondence groups, which would report to MEPC 61:

- [.1 Correspondence Group on review of MARPOL Annex V;
- .2 Correspondence Group on development of ship recycling guidelines;
- .3 Correspondence Group on Environmental Risk Evaluation Criteria; and
- .4 Correspondence Group on Noise from commercial shipping and adverse impacts on marine life.]

**Intersessional meetings**

19.13 The Committee approved the holding of the following intersessional meetings:

- [.1 OPRC/HNS Technical Group, to be held in the week before MEPC 61 in September 2010, which should report to MEPC 61;
- .2 ESPH Working Group to be held from 18 to 22 October 2010; and
- .3 Working Group on Energy Efficiency Measures for Ships.]

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## **20 APPLICATION OF THE COMMITTEES' GUIDELINES**

20.1 The Committee recalled that MEPC 59 had considered and approved draft amendments to the Guidelines on the organization and method of work of the MSC and MEPC and their subsidiary bodies (MSC-MEPC.1/Circ.2) concerning "Capacity-building for the implementation of new measures" (MEPC 59/24, paragraph 11.23 and annex 29). The Committee also recalled that MEPC 59 had considered the issue about new work programmes for the Committees and, in particular, for sub-committees (MEPC 59/21/1, annex 3) and had decided to consider the matter further at MEPC 61 (September 2010), taking into account the decision of MSC 87 (May 2010) as appropriate.

20.2 The Committee noted that A 26, recognizing the need for a uniform basis for the application of the Strategic Plan and the High-level Action Plan throughout the Organization, and for strengthening the existing working practices through the provision of enhanced planning and management procedures, had adopted the new Guidelines on the application of the Strategic Plan and the High-level Action Plan by resolution A.1013(26). The Committee also noted that the Assembly had requested the Committees to review and revise, during the 2010-2011 biennium, the Committees' Guidelines (MSC-MEPC.1/Circ.2) with a view to bringing them in line with the Guidelines on the application of the Strategic Plan and the High-level Action Plan.

20.3 The Committee noted further that, in pursuance of the above request, the Secretariat, in consultation with the MSC and MEPC Chairmen, had prepared the draft revised Committees' Guidelines for consideration by MSC 87 (MSC 87/23). The Committee agreed to consider the matter at MEPC 61 with a view to approving the revised Committees' Guidelines, taking into account the decision of MSC 87 and the Chairmen's Meeting, which would be held during MSC 87.

## **21 ANY OTHER BUSINESS**

### **Amendments to the Rules of Procedure of the Committee**

21.1 The Committee recalled that the Assembly, at its twenty-fifth session, recognizing that the African Union is the successor organization to the Organization of African Unity, approved a new Agreement of Co-operation between the African Union and the Organization.

21.2 Pursuant to the above decision of the Assembly, the Committee, having considered document MEPC 60/21 (Secretariat), approved the following amendments to paragraph (a) of Rule 4 of the Committee's Rules of Procedure:

"Rule 4

In paragraph (a) of the Rule, the words "Organization of African Unity" are replaced by the words "African Union".

21.3 The Committee also approved, consequent to the entry into force on 7 December 2008 of the amendments to the Convention on the International Maritime Organization regarding the institutionalization of the Facilitation Committee, the following amendment to paragraph (c)(ii) of Rule 4 of the Committee's Rules of Procedure:

"Rule 4

In paragraph (c)(ii) of the Rule, the reference to Article "62" of the Convention on the International Maritime Organization is replaced by the reference to Article "67".

21.4 In this context, the Committee recalled that, in accordance with Rule 47, the Rules of Procedure may be amended by a decision of the Committee taken by a majority of the Members present and voting.

### **Environmental aspects of polar shipping**

21.5 The Committee recalled that MEPC 59 concurred with the decision of MSC 86 to include a high-priority item on "Development of a mandatory Code for ships operating in polar waters" in the work programme of the DE Sub-Committee, with a target completion date of 2012.

21.6 The delegation of Norway, in introducing document MEPC 60/21/1 on Environmental aspects of polar shipping, highlighted several aspects of what the environmental chapter of a "Code for ships operating in polar waters" could contain in order to prepare for discussions in the DE Sub-Committee at its next session.

21.7 The Committee noted that, by systematically analysing the MARPOL, AFS and BWM Conventions and others, it could be possible to clearly identify what type of extra measures, if any, should be put in place in the polar regions as a consequence of their unique temperature-, light- and ice- conditions.

21.8 While a number of delegations supported the submission and agreed that the analysis could include issues such as grey water, black water and black carbon emissions from ships operating in the polar regions, concerns were raised regarding the premature nature of this analysis, as the DE Sub-Committee had only recently commenced its work.

21.9 In response to strong concerns expressed by the delegation of the Russian Federation, and supported by others, that some measures suggested in paragraph 4.2 of document MEPC 60/21/1 to ban the transpolar transportation of MARPOL Annex I or Annex II cargoes, the delegation of Norway stated that it was not submitting any proposals or conclusions, but was offering an overview of possible questions that could warrant further consideration.

21.10 In this regard, the Committee agreed that any policy matters that arose from the suggested analysis would be a matter for decision by the Committee.

21.11 In the ensuing discussion, the Committee agreed to refer document MEPC 60/21/1 to the DE Sub-Committee for consideration under its agenda item "Development of a mandatory code for ships operating in polar waters".

### **Addressing Marine Pollution from Oil-based Lubricants during Normal Operations**

21.12 The Committee noted that document MEPC 60/21/2 (WWF and FOEI) raised specific concerns over the extent of oil-based lubricant pollution, as an example of the scale of operational chemical pollution and the alleged inadequacy of existing IMO regulations and industry operating practices to reduce its impact on the marine environment. The volume of chemicals used by the shipping industry also raised concerns about the environmental risks of spills in the case of accidents.

21.13 The Committee, having noted that there were a number of ways to reduce oil-based lubricant pollution, invited Member Governments to submit proposals to its next session for consideration.