

THIRTIETH CONSULTATIVE MEETING OF CONTRACTING PARTIES TO THE CONVENTION ON THE PREVENTION OF MARINE POLLUTION BY DUMPING OF WASTES AND OTHER MATTER 1972 & THIRD MEETING OF CONTRACTING PARTIES TO THE 1996 PROTOCOL TO THE CONVENTION ON THE PREVENTION OF MARINE POLLUTION BY DUMPING OF WASTES AND OTHER

MATTER 1972 27 – 31 October 2008 Agenda item 16 LC 30/16 9 December 2008 Original: ENGLISH

REPORT OF THE THIRTIETH CONSULTATIVE MEETING AND THE THIRD MEETING OF CONTRACTING PARTIES

Table of Contents

Section	Paragraph Nos.	Page Nos.
EXECUTIVE SUMMARY	0.1 - 0.2	4 - 8
INTRODUCTION AND ADOPTION OF THE AGENDA	1.1 – 1.21	9 – 13
STATUS OF THE LONDON CONVENTION AND PROTOCOL	2.1 – 2.15	13 – 15
CONSIDERATION OF THE REPORT OF THE SCIENTIFIC GROUPS	3.1 – 3.23	15 – 19
OCEAN FERTILIZATION	4.1 - 4.18	19 - 22
CO ₂ SEQUESTRATION IN SUB-SEABED GEOLOGICAL FORMATIONS	5.1 – 5.34	23 – 29
COMPLIANCE ISSUES	6.1 - 6.36	30 - 36
TECHNICAL CO-OPERATION AND ASSISTANCE	7.1 - 7.50	36 - 43
DEVELOPMENT OF GUIDELINES FOR PLACEMENT OF ARTIFICIAL REEFS	8.1 – 8.11	43 – 44

For reasons of economy, this document is printed in a limited number. Delegates are kindly asked to bring their copies to meetings and not to request additional copies.



LC 30/16 - 2 -

INTERPRETATION OF THE LONDON CONVENTION AND PROTOCOL.	9.1 – 9.35	45 – 50
MATTERS RELATED TO THE MANAGEMENT OF RADIOACTIVE WASTES.	10.1 – 10.9	50 – 52
MONITORING FOR THE PURPOSES OF THE LONDON CONVENTION AND PROTOCOL	11.1 – 11.6	52
OUTREACH TO PROSPECTIVE NEW CONTRACTING PARTIES TO THE PROTOCOL AND RELATIONS WITH OTHER ORGANIZATIONS IN THE FIELD OF MARINE ENVIRONMENTAL PROTECTION	12.1 – 12.26	52 – 56
ADMINISTRATIVE ARRANGEMENTS AND FUTURE WORK	13.1 – 13.23	
ANY OTHER BUSINESS.	14	61
ELECTION OF OFFICERS FOR BOTH GOVERNING BODIES	15.1 – 15.5	61 – 62
CONSIDERATION AND ADOPTION OF THE REPORT	16	62

ANNEXES

ANNEX 1	AGENDA FOR THE 30^{TH} CONSULTATIVE MEETING AND THE 3^{RD} MEETING OF CONTRACTING PARTIES
ANNEX 2	STATEMENTS ON DOCUMENTS LC 30/2 AND LC 30/2/1 "STATUS OF THE LONDON CONVENTION AND PROTOCOL"
ANNEX 3	REVISED GUIDELINES FOR THE ASSESSMENT OF WASTES OR OTHER MATTER THAT MAY BE CONSIDERED FOR DUMPING
ANNEX 4	REVISED SPECIFIC GUIDELINES FOR THE ASSESSMENT OF INERT, INORGANIC GEOLOGICAL MATERIAL
ANNEX 5	STATEMENT BY THE DELEGATION OF VANUATU ON OCEAN FERTILIZATION
ANNEX 6	RESOLUTION LC-LP.1(2008) ON THE REGULATION OF OCEAN FERTILIZATION
ANNEX 7	REPORT OF THE $1^{\rm ST}$ MEETING OF THE COMPLIANCE GROUP UNDER THE LONDON PROTOCOL

- 3 - LC 30/16

- ANNEX 8 REVISED TABLES OF THE ELECTRONIC REPORTING FORMAT UNDER THE LONDON CONVENTION AND PROTOCOL & FORMAT FOR REPORTING ON CARBON DIOXIDE STREAMS FOR DISPOSAL INTO SUB-SEABED GEOLOGICAL FORMATIONS UNDER THE LONDON PROTOCOL
- ANNEX 9 IMPLEMENTATION PLAN OF THE 'BARRIERS TO COMPLIANCE' PROJECT (2008)
- ANNEX 10 GUIDANCE ON MANAGING SPOILT CARGOES
- ANNEX 11 GUIDANCE ON BEST MANAGEMENT PRACTICES FOR REMOVAL OF ANTI-FOULING COATINGS FROM SHIPS, INCLUDING TBT HULL PAINTS
- ANNEX 12 LIST OF RECENT AND PLANNED PUBLICATIONS TO RAISE THE AWARENESS OF THE LONDON CONVENTION AND PROTOCOL AND THEIR ACHIEVEMENTS
- ANNEX 13 LIST OF SUBSTANTIVE ITEMS AGREED FOR INCLUSION IN THE AGENDA FOR THE 31ST CONSULTATIVE MEETING AND 4TH MEETING OF CONTRACTING PARTIES

LC 30/16 - 4 -

EXECUTIVE SUMMARY

O.1 Contracting Parties to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972 (London Convention) and the Contracting Parties to the 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972 (London Protocol) met from 27 to 31 October 2008 at IMO Headquarters, London, for their 30th Consultative Meeting and 3rd Meeting of Contracting Parties, respectively.

- 0.2 The main results of these Meetings are described below:
 - .1 The Meetings noted that to date **85** Governments had ratified or acceded to the London Convention and **36** to the London Protocol, with four Parties acceding to the Protocol in 2008.
 - Acting on the "Statement of Concern" of the Scientific Groups in June 2007 that .2 knowledge on the effectiveness and potential environmental impacts of ocean fertilization was currently insufficient to justify large-scale operations and that this could have negative impacts on the marine environment and human health, the governing bodies agreed in November 2007 that they would further study the issue from the scientific and legal perspectives with a view to its regulation. Building on the preparatory work in the intersessional period on both the scientific/technical issues and on a summary of the legal views by Contracting Parties as to whether, and how, the legal framework of the London Convention and Protocol applies to key scenarios on ocean fertilization, the governing bodies developed and adopted the (non-binding) resolution LC-LP.1 (2008) on the regulation of ocean fertilization. By this resolution Parties have declared, inter alia, that, "given the present state of knowledge, ocean fertilization activities other than legitimate scientific research should not be allowed".
 - In addition, it was agreed to further consider a **potential legally binding** resolution or an amendment to the London Protocol on ocean fertilization at the next session in 2009. Furthermore, the governing bodies requested the Scientific Groups to prepare a document, for the information of all Contracting Parties, summarizing the current state of knowledge on ocean fertilization, relevant to assessing impacts on the marine environment, taking into account the work done on this issue in other fora.
 - The Meeting of Contracting Parties reviewed the report of the Legal and Technical Working Group on **Transboundary CO₂ Sequestration Issues** which prepared comprehensive advice on the question if injection of CO₂ streams into sub-seabed geological formations is expected to cross a jurisdictional boundary between two or more countries. The Working Group developed a possible text for amending Article 6 of the Protocol, which prohibits the export of wastes for dumping purposes, as well as complementary, explanatory texts for the 2007 CO₂ Sequestration Guidelines.
 - .5 In discussing the report of the Working Group, several Contracting Parties to the Protocol expressed the view that it was too early to aim at amending Article 6 and that other options, such as an interpretative resolution, should be explored further before a decision was taken. Other Contracting Parties supported the need for

- 5 - LC 30/16

amending Article 6 and reasoned that the draft text proposed by the Working Group was balanced. As a result, the Meeting of Contracting Parties agreed to: (1) give the political signal that the London Protocol should not constitute a barrier to the transboundary movement of CO_2 streams; and (2) continue this discussion intersessionally by correspondence, focusing, *inter alia*, on the option of an amendment of Article 6 on the basis of the draft text developed by the Working Group, or an interpretative resolution, or a combination of the two. The relevance of the Basel Convention and its relation to the London Protocol should also be explored further.

- .6 The Meeting of Contracting Parties adopted a **format for reporting on carbon dioxide streams** into sub-seabed geological formations under the London Protocol. The electronic format in use for reporting on dumping activities under the London Convention and Protocol was amended accordingly.
- .7 Following the adoption, in 2007, of the Compliance Procedures and Mechanisms (CPM) pursuant to Article 11 of the London Protocol, the Meeting of Contracting Parties elected, at this session, the six members of the Compliance Group that had been nominated by Contracting Parties, while noting that there would be place for a total of 15 members under the CPM. The Compliance Group met for its 1st session from 27 to 29 October 2008 and noted that no reports of possible non-compliance had yet been referred to it. The Group discussed organizational matters, developed a statement on how to deal with a potential conflict of interest for its members when reviewing cases and also recommendations on how it would invite and prepare for reports to be received from Contracting Parties. The Group furthermore developed a detailed future work programme for the period up to and including its 2nd session. The Meeting of Contracting Parties endorsed all the recommendations of the Group and agreed that its 2nd session should be convened in parallel with the next meeting of the governing bodies, for reasons of efficiency and cost
- .8 The governing bodies reviewed and adopted the following technical guidance documents:
 - .1 The "Revised Generic Guidelines for the Assessment of Wastes and Other Matter", replacing the 1997 Guidelines on the same issue;
 - .2 The "Revised Specific Guidelines for the Assessment of Inert, Inorganic Geological Material", replacing the 2000 Guidelines on the same issue;
 - .3 The "Guidance for the Development of Action Lists and Action Levels for Dredged Material". The Secretariat was instructed to publish the Guidance in 2009 following a sound technical edit by the IMO Publishing Service;
 - .4 The "LC/LP-UNEP Guidelines for the Placement of Artificial Reefs". The Secretariat was instructed to publish these Guidelines in the UN working languages as soon as possible in 2009, using funds received for this purpose from UNEP and Contracting Parties;

LC 30/16 - 6 -

- of co-operation between the governing bodies and MEPC, which is aimed at the development of practical guidance for mariners to manage spoilt cargoes, it was agreed to forward this Guidance to MEPC 59 for its consideration and adoption and recommending its distribution through a joint LC-LP/MEPC Circular to replace Circular Letter No.2074, issued in 1998 on the same topic; and
- The "Guidance on Best Management Practices for Removal of Anti-Fouling Coatings from Ships, including TBT hull paints". This Guidance would also be forwarded to MEPC 59 for its consideration and adoption aimed at distribution through a joint LC-LP/MEPC Circular.
- .9 The Meetings reviewed the implementation of the 2004 **Strategy to improve reporting** under the London Convention and Protocol and:
 - adopted the "Electronic Form for Annual Reporting on Dumping Operations at Sea" (E-Form), with inclusion of a new Table concerning "Details of Carbon Dioxide Streams Storage Sites and Permits" and declared the E-Form trial phase to be over;
 - .2 encouraged Contracting Parties to use this E-Form as much as possible when reporting their dumping activities, until further notice, while reassuring those Contracting Parties who wish to continue reporting in paper form, that this would also be acceptable;
 - .3 agreed to review the LC/LP reporting formats once the work being undertaken by the OSPAR and HELCOM Commissions and UNEP/MAP on their reporting formats was completed;
 - .4 urged all Contracting Parties, if they had not done so, to provide the Secretariat with the reports on their dumping activities in 2006, as soon as convenient;
 - instructed the Secretariat to publish the summary report on permits issued in 2005 in January 2009 and submit a draft summary report on permits issued in 2006 to the Correspondence Group on Assessment of Dumping Reports for its review; and
 - invited this Correspondence Group to report on the outcome of its review to the next session of the Scientific Groups.
- 10 **Technical co-operation and assistance**: The Meetings, having adopted in 2007 a strategic approach to implementation of the "Barriers to Compliance (B2C)" project to assist with prioritization of support for States to overcome the legislative, institutional, technical and socio-economic barriers that have been identified towards full compliance with the London Protocol, adopted, at this session, an Implementation Plan for this project. This Plan was a living document, which would be kept up-to-date by a Steering Group, under the lead of Italy.

- 7 - LC 30/16

- 11 The Meetings also reviewed the planning of various activities under the B2C project and noted, with appreciation, the following new, substantial contributions pledged for this project by Canada (CS\$25,000), Spain (€30,000), the Republic of Korea (amount to be confirmed), the United Kingdom (£20,000), and the United States (US\$100,000). The Meetings noted also the progress with accessing up to €350,000 pledged by France in 2007, for programming TC activities, as part of the B2C project, in Algeria and Egypt for the period 2009-2011.
- .12 The Meetings also reviewed progress reports on several other technical co-operation and assistance projects being implemented, including the development of: (1) the Instructors' Manual and Electronic Slide Set of the Waste Assessment Guidance (WAG) Tutorial; (2) an extension to the WAG Tutorial for low-technology techniques for assessing dredged material; and (3) the global inventory of dumping activities in the period 2000-2005 (State of Sea Dumping Report-SSDR).
- London Protocol and, in particular, opportunities for lead countries to promote this message at appropriate meetings. The Meetings approved in this regard a plan for several publications in 2009 to enhance the awareness of the London Convention and Protocol, including some of the technical guidance documents listed under sub-item .8 above, as well as an outline for a publication in 2010 on CO₂ sequestration in sub-seabed geological formations. Consequently, the Secretariat was instructed to complete the publications as planned in co-operation with the IMO Publishing Service. The Meetings also noted the recent substantive improvements to the London Convention website, including improving access to documents and instructed the Secretariat to continue this work and provide the next Meetings with an update on this matter.
- of the London Protocol, IMO should prepare, every two years, a budget and a financial account for the administration of the Protocol, noted an overview by the Secretariat of the IMO budget for LC/LP Secretariat duties for 2008 and 2009 and of the actual costs for these duties for 2007. The Meetings also noted an analysis linking the activities in the Joint Long-term Programme for the London Convention and Protocol (2008-2010) with possible budgetary implications. The Meeting of Contracting Parties concluded that, at this stage, it had no specific requests to IMO to perform additional functions or duties for the administration of the London Protocol and thanked IMO for the continued support it provided for this administration.
- London Convention and Protocol Technical Co-operation Trust Fund and instructed the Secretariat to advise the Secretary-General of IMO to establish it under the IMO Financial Regulations and Financial Rules. Contributions to the Trust Fund would be *voluntary only* and it would become operational in the course of 2009 and be used to collect and administer new funds only, while the existing agreements between individual donors for LC/LP projects and IMO would be implemented as planned.

LC 30/16 - 8 -

The governing bodies reviewed the updated **Joint Long-term Programme** for the London Convention and Protocol for 2008 to 2010 as prepared by Australia. Due to the fact that both the Scientific Groups and the governing bodies now had similarly formatted Joint Work Programmes, the Secretariat proposed that they be merged into one comprehensive document. The aim would be to prepare this document immediately after each session of the governing bodies at the end of the year, which would then serve as a reference document at the start of the new meetings' season. The governing bodies adopted this proposal and instructed the Secretariat to prepare as soon as possible the resulting comprehensive Joint Long-term Programme for distribution in all three working languages and for posting on the London Convention website.

.17 The Meetings agreed that:

- the 32nd session of the LC Scientific Group and the 3rd session of the LP Scientific Group should be held, concurrently, at FAO Headquarters, in Rome, Italy, from 25 to 29 May 2009, at the kind invitation of the Italian Government. These meetings would be held back-to-back with the 3-day IMO/UNEP Regional Workshop on the Promotion of the London and Barcelona Dumping Protocols (dates yet to be confirmed);
- .2 the 31st Consultative Meeting and the 4th Meeting of Contracting Parties should be held, concurrently, at IMO Headquarters, London, from 26 to 30 October 2009; and
- .3 the **second meeting of the Compliance Group** should be held at the same location and in parallel to that session.
- The Consultative Meeting unanimously **elected** Ms Chen Yue (China) and Mr. Matthew Johnston (Australia) as Chairman and 1st Vice-Chairman, respectively, for the intersessional period and for the 31st Consultative Meeting. The Meeting of Contracting Parties also unanimously **elected** the same officers for the intersessional period and for the 4th Meeting of Contracting Parties. The election of 2nd Vice-Chairmen for both governing bodies was, yet again, postponed till 2009 in the absence of nominations at that stage. The Meetings praised the outgoing Chairman, Mr. Victor Escobar (Spain), for his excellent leadership in the past three years, resulting in many noteworthy achievements.

- 9 - LC 30/16

1 INTRODUCTION

- 1.1 The 30th Consultative Meeting of Contracting Parties to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matter, 1972 (London Convention), convened in accordance with Article XIV(3)(a) of the Convention, and the 3rd Meeting of Contracting Parties to the 1996 Protocol to the London Convention 1972 (London Protocol), convened in accordance with Article 19.2.1 of the Protocol, were concurrently held at the Headquarters of the International Maritime Organization, London, from 27 to 31 October 2008, under the chairmanship of Mr. Victor Escobar Paredes (Spain). Ms Chen Yue (China) was First Vice-Chairman.
- 1.2 The Consultative Meeting was attended by delegations from the following **38** Contracting Parties to the London Convention:

ARGENTINA MEXICO
AUSTRALIA MOROCCO
BELGIUM NETHERLANDS
BOLIVIA NEW ZEALAND
BRAZIL NIGERIA

BRAZIL NIGERIA CANADA NORWAY

CHILE PAPUA NEW GUINEA

CHINA PERU

CUBA PHILIPPINES
DENMARK POLAND
DOMINICAN REPUBLIC PORTUGAL

EGYPT REPUBLIC OF KOREA
FRANCE RUSSIAN FEDERATION
GERMANY SOUTH AFRICA

IRAN, ISLAMIC REPUBLIC OF SPAIN

IRELAND SWEDEN

ITALY UNITED KINGDOM
JAPAN UNITED STATES
KENYA VANUATU

1.3 The Meeting of Contracting Parties was attended by delegations from the following 24 Contracting Parties to the London Protocol:

ANGOLA KENYA

AUSTRALIA MARSHALL ISLANDS

BELGIUM MEXICO

CANADA NETHERLANDS
CHINA NEW ZEALAND

DENMARK NORWAY
EGYPT SAUDI ARABIA
FRANCE SOUTH AFRICA

GERMANY SPAIN IRELAND SWEDEN

ITALY UNITED KINGDOM

JAPAN VANUATU

LC 30/16 - 10 -

1.4 A representative from the following Associate Member of IMO attended the Meetings:

HONG KONG, CHINA

1.5 Observers from the following **nine** States that are neither Contracting Parties to the London Convention nor the London Protocol attended the Meetings:

ALGERIA MALAYSIA BAHAMAS SENEGAL ECUADOR SINGAPORE GHANA URUGUAY

LIBERIA

1.6 Representatives from the INTERNATIONAL ATOMIC ENERGY AGENCY (IAEA) and the following United Nations organizations attended the Meetings:

UNITED NATIONS ENVIRONMENT PROGRAMME (UNEP)
UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL
ORGANIZATION (UNESCO)/INTERGOVERNMENTAL OCEANOGRAPHIC
COMMISSION (IOC)
UNITED NATIONS UNIVERSITY (UNU)

1.7 An observer from the following intergovernmental organization attended the Meetings:

ORGANIZATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT/INTERNATIONAL ENERGY AGENCY (IEA/OECD)

1.8 Observers from the following **five** international non-governmental organizations also attended the Meetings:

INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS (IAPH) THE WORLD CONSERVATION UNION (IUCN) ADVISORY COMMITTEE ON PROTECTION OF THE SEA (ACOPS) GREENPEACE INTERNATIONAL INTERNATIONAL EMISSIONS TRADING ASSOCIATION (IETA)

OPENING OF THE MEETINGS

1.9 In opening the proceedings, the Chairman welcomed all participants to both Meetings.

THE SECRETARY-GENERAL'S OPENING ADDRESS

1.10 On behalf of the Secretary-General of IMO, Mr. E.E. Mitropoulos, the Director of the Marine Environment Division, Mr. Miguel Palomares, welcomed participants and delivered his opening address. The full text of the opening address is shown in document LC 30/INF.7.

CHAIRMAN'S REMARKS

1.11 The Chairman thanked Mr. Palomares for his words of welcome, his advice on IMO's activities and expectations and the reassurance of the support IMO would continue to give to work being undertaken under the London Convention and Protocol. The Chairman indicated that

- 11 - LC 30/16

he would apply, again this year, the "two instruments – one family" approach, which had worked very well at the first two meetings of the governing bodies since 2006. In particular, he mentioned:

- .1 the many guidance documents which the Meetings planned to review and adopt at this session, stressing their importance for the implementation of the London Convention and Protocol;
- .2 that it was indeed his intention to propose exploring at this session the direction that regulation of ocean fertilization might take under both the Convention and Protocol;
- .3 it would indeed be appropriate to consider a review of the implementation of the London Convention and Protocol in light of the new ship recycling convention being finalized in 2009; and
- .4 the governing bodies should continue to focus on prioritizing technical co-operation and assistance activities based on the "Barriers to Compliance" report submitted, by reviewing its Plan of Implementation and, perhaps, establishing an LC Technical Co-operation Trust Fund to draw on additional resources for this purpose.
- 1.12 Mr. Escobar also mentioned that even in the current global financial crisis and the evolving economic recession it would be important to continue to reflect on the commitments under Agenda 21 and their importance for sustainable development and environmental protection issues.
- 1.13 Finally, the Chairman reconfirmed the importance of close and pragmatic co-operation with other organizations in the field of environmental protection, including IMO.

ADOPTION OF THE AGENDA

1.14 The agenda for the Consultative Meeting and the Meeting of Contracting Parties, as adopted, is shown in annex 1. It includes under each agenda item a list of documents prepared for consideration. Both governing bodies also agreed on a timetable for their work (LC 30/1/1, annex 2).

PARTICIPATION OF INTERGOVERNMENTAL ORGANIZATIONS AND INTERNATIONAL NON-GOVERNMENTAL ORGANIZATIONS

1.15 The Secretariat informed the Meetings that an application for observership status had been received in the intersessional period from the International Emissions Trading Association (IETA). IETA's mission is: "to be an independent, not for profit organization dedicated to the development and establishment of effective market-based trading systems for greenhouse gas emissions that are demonstrably fair, open, efficient, accountable and consistent across national boundaries". In its communication with IETA, the Bureau had concentrated on the key criterion for granting NGOs observership status as agreed in 1988, which is that NGOs should have "specialized technical expertise relating to the objectives of the Convention and Protocol".

LC 30/16 - 12 -

1.16 Initially, the Bureau tended towards rejection of this application on the grounds that the IETA's objectives as an organization were very different from those of the London Convention and Protocol which are aimed at protection of the marine environment. However, after careful consideration of further information provided and also in view of the fact that the London Convention and Protocol had broadened their attention with the aim of protection of the marine environment in recent years by including, *inter alia*, CO₂ sequestration in sub-seabed geological formations and ocean fertilization, the Bureau had agreed to invite IETA to this session, albeit on a provisional basis, and to request the governing bodies to decide whether or not IETA should be granted full observership status for the next Meetings.

1.17 The observer from IETA informed the Meetings that IETA:

- is an accredited NGO with other multilateral environmental agreements, including the UN Framework Convention on Climate Change (UNFCCC);
- is an international NGO headquartered in Geneva, Switzerland, representing 186 member companies worldwide;
- is dedicated to ensure that the objectives of the UNFCCC were met and to the establishment of effective systems for trading in greenhouse gas emissions by business in an economically efficient manner, while maintaining societal equity and environmental integrity;
- .4 represented a broad range of interests and had expertise in climate change mitigation programmes that relate to the marine environment and the work programme of the London Convention and Protocol, specifically CO₂ sequestration in sub-seabed geological formations and ocean iron fertilization to sequester CO₂. Its members are international leaders in the development of these projects, and in the quantification, verification and registration of carbon credits from such projects; and
- .5 offered its collective and individual expertise to contribute to the scientific and technical questions and issues that are likely to be raised as sub-seabed and ocean sequestration projects are being developed and implemented.

1.18 Both governing bodies agreed to invite United Nations organizations and intergovernmental organizations to the 31st Consultative Meeting and the 4th Meeting of Contracting Parties and to intersessional meetings of their respective subsidiary bodies, as follows:

UNITED NATIONS

REGIONAL SEAS CONVENTIONS UNDER THE UNITED NATIONS ENVIRONMENT PROGRAMME (UNEP)

INTERNATIONAL ATOMIC ENERGY AGENCY (IAEA)

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT (WORLD BANK)

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT (OECD)

EUROPEAN COMMISSION (EC)

INTERNATIONAL COUNCIL FOR THE EXPLORATION OF THE SEA (ICES)

OSPAR COMMISSION

- 13 - LC 30/16

HELSINKI COMMISSION PERMANENT COMMISSION FOR THE SOUTH PACIFIC (CPPS) SOUTH PACIFIC REGIONAL ENVIRONMENT PROGRAMME (SPREP)

1.19 Both governing bodies at the conclusion of their sessions decided that the following 10 international non-governmental organizations should be invited to the 31st Consultative Meeting and the 4th Meeting of Contracting Parties and to intersessional meetings of their respective subsidiary bodies:

INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS (IAPH) EUROPEAN CHEMICAL INDUSTRY COUNCIL (CEFIC) GREENPEACE INTERNATIONAL THE WORLD CONSERVATION UNION (IUCN) INTERNATIONAL NAVIGATION ASSOCIATION (PIANC) INTERNATIONAL ASSOCIATION OF OIL & GAS PRODUCERS (OGP) ADVISORY COMMITTEE ON PROTECTION OF THE SEA (ACOPS) WORLD ORGANIZATION OF DREDGING ASSOCIATIONS (WODA) INTERNATIONAL OCEAN INSTITUTE (IOI) INTERNATIONAL EMISSIONS TRADING ASSOCIATION (IETA)

- 1.20 The governing bodies agreed to continue the invitation to IETA, on a provisional basis, until their next session and to reconsider the status of IETA at that session based on a report outlining the added value that IETA could bring to these proceedings.
- 1.21 The Secretariat was invited to provide a report on the attendance at, submission of documents to and level of participation in Meetings by all non-governmental organizations during the last five Meetings in order to enable the governing bodies, at their next session, to consider the continuation of their status as observers.

2 STATUS OF THE LONDON CONVENTION AND PROTOCOL

THE LONDON CONVENTION 1972 (LONDON CONVENTION)

2.1 The governing bodies noted the report by the Secretary-General (LC 30/2) on the status of the London Convention and that to date **85** Governments had ratified or acceded to the Convention.

THE 1996 PROTOCOL TO THE LONDON CONVENTION 1972 (LONDON PROTOCOL)

2.2 The governing bodies also noted the report by the Secretary-General (LC 30/2/1) on the status of the London Protocol and that the following **36** States had ratified or acceded to it: Angola, Australia, Barbados, Belgium, Bulgaria, Canada, China, Denmark, Egypt, France, Georgia, Germany, Iceland, Ireland, Italy, Japan, Kenya, Luxembourg, the Marshall Islands, Mexico, the Netherlands, New Zealand, Norway, Saudi Arabia, Sierra Leone, Slovenia, South Africa, Spain, St. Kitts and Nevis, Suriname, Sweden, Switzerland, Tonga, Trinidad and Tobago, the United Kingdom and Vanuatu. Six of these States (Angola, Georgia, the Marshall Islands, Saudi Arabia, St. Kitts and Nevis, and Trinidad and Tobago) were not Contracting Parties to the London Convention. The governing bodies also noted that five of the 18 Contracting Parties to the Convention which were signatories to the London Protocol had not yet ratified it (Argentina, Brazil, Finland, Morocco, and the United States).

LC 30/16 - 14 -

2.3 The governing bodies further noted with appreciation that the following four States had joined the Protocol since the 2nd Meeting of Contracting Parties was held in 2007: Kenya, Sierra Leone, the Marshall Islands, and as at 24 October 2008, the Netherlands.

1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
1	3	3	6	3	NIL	2	3	1	8	2	4

- 2.4 The Meetings acknowledged that, even with the Protocol in force, it remained important to obtain accurate information concerning the progress of Contracting Parties to the London Convention and of observer States represented this week towards ratifying the Protocol. This would assist the Meetings in planning their work and to monitor the shift in momentum from the Convention to the Protocol.
- 2.5 The delegations from Argentina, Brazil, Ghana, Nigeria, the Russian Federation and the United States reported on their progress towards accession to, or ratification of, the London Protocol.
- 2.6 Several delegations informed the Meetings that their countries' analysis of the implications of the Protocol and the preparation of national regulations had been completed. They estimated completion of the national approval process during 2009, while others noted that accession to, or ratification of, the London Protocol was under consideration but that no time estimate could be given.
- 2.7 The delegation of the Republic of Korea informed the Meetings that the Republic of Korea had incorporated all the necessary requirements of the London Protocol into its domestic legislation and that it intended to deposit its instrument of accession to the Protocol by the end of 2008. The Republic of Korea would however, due to inevitable domestic circumstances, continue with the disposal at sea of bauxite residues until 31 December 2015, as set out in the Marine Environment Management Act. Under no circumstances would the dumping of these wastes be permitted beyond that date. For 2008 a permit had been issued to dump 12,000 m³ of bauxite residues. Reports on the environmental impact of these dumping operations would be submitted to the Scientific Groups when they became available. Finally, the delegation indicated that it was the intention to attach a declaration to the instrument of accession explaining this situation.
- 2.8 The Chairman expressed his appreciation for this statement by the Republic of Korea and suggested that it be discussed further, if necessary, under item 6.2 of the agenda.
- 2.9 All States preparing for the Protocol were encouraged to keep the Secretariat informed of developments.

CONTINUATION IN GROWTH OF THE MEMBERSHIP TO THE LONDON CONVENTION

2.10 The Secretariat informed the Meetings that the following 11 countries had joined the London Convention since the London Protocol was adopted in 1996: Azerbaijan, Bolivia, Bulgaria, Equatorial Guinea, Iran, Montenegro, Peru, Saint Vincent & the Grenadines, Serbia, Sierra Leone and Tanzania. If the purely "administrative growth" was discounted, due to the dissolution of the State Union of Serbia and Montenegro in 2006 and the fact that Bulgaria and Sierra Leone had recently acceded to both the Convention and Protocol, the real growth in membership to the Convention had been eight countries since 1996. Had all these countries

- 15 - LC 30/16

chosen the Protocol, the membership ratio would then stand at 77 Contracting Parties to the Convention and 44 to the Protocol, compared with 85 and 36 Contracting Parties, respectively, as registered to date. At the time the Protocol was developed it was agreed to retain the London Convention as an active agreement, hoping that its membership and new countries would join the Protocol and that, consequently, the momentum would shift to the Protocol in a couple of years. New countries apparently assumed that they had a choice between joining the Convention or the Protocol

2.11 The Meetings agreed to discuss this issue further under outreach activities (see chapter 12 of this report).

OTHER ISSUES

- 2.12 The delegation of Argentina presented a statement related to the documents LC 30/2 and LC 30/2/1, in particular with regard to the reference to the dispute between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas) (LC 30/INF.6).
- 2.13 The delegation of the United Kingdom also presented a statement related to the documents LC 30/2 and LC 30/2/1 and reflecting its position in the dispute between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas).
- 2.14 The Secretariat informed the meetings that in preparation of the documents LC 30/2 and LC 30/2/1, it had consulted with the United Nations Office in New York. The Secretariat confirmed that the texts used in these documents to describe the existence of the conflict over sovereignty between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland were in keeping with United Nations policy.
- 2.15 The statements of the delegations of Argentina and the United Kingdom are reproduced in annex 2 to this report.

3 CONSIDERATION OF THE REPORT OF THE SCIENTIFIC GROUPS

3.1 The Chairman of the Scientific Groups, Dr. Chris Vivian (United Kingdom), informed the Meetings of the main outcomes of the 31^{st} session of the LC Scientific Group and the 2^{nd} session of the LP Scientific Group, which were held, concurrently, in Guayaquil, Ecuador, from 19 to 23 May 2008 (LC 30/3).

REVISED GENERIC GUIDELINES

- 3.2 The delegation of Australia, in introducing document LC 30/INF.5, informed the Meetings that in May 2008 the Scientific Groups had completed the review of the Generic Waste Assessment Guidelines, as shown in documents LC 30/INF.5 and LC/SG 31/16, annex 4, and had agreed to forward them to this session, with a view to their adoption. It was envisaged that the revised text would replace the one which the 19th Consultative Meeting adopted in 1997, as shown in document LC 19/10, annex 2.
- 3.3 The Meetings noted that the schematic diagram set out in the Appendix of the annex to document LC 30/INF.5 required finalization and that the delegation of Australia would complete this prior to the next joint session of the Scientific Groups.

LC 30/16 - 16 -

- 3.4 The Meetings noted that the key drivers for the review since 1997 had been:
 - .1 experience with implementation of these guidelines and the specific guidelines that are based upon it, including the WAG Tutorials;
 - .2 the Protocol had entered into force in 2006; and
 - .3 the 2006 amendments to Annex 1 to the Protocol regarding CO₂ sequestration in sub-seabed geological formations.

ACTION BY THE GOVERNING BODIES

3.5 In conclusion, the governing bodies:

- .1 adopted the Revised Guidelines for the Assessment of Wastes or Other matter that May be Considered for Dumping, as shown at annex 3 to this report;
- .2 invited Australia to finalize the schematic diagram in the Appendix to the Revised Guidelines and submit this to the next joint session of the Scientific Groups for their consideration; and
- .3 endorsed the Scientific Groups' recommendation that a consistency check be carried out between the Generic and the Specific Guidelines. This item should be included in the Work Programme of the Scientific Groups.
- 3.6 The Meetings thanked both the Republic of Korea, in particular Dr. Gi-Hoon Hong, who had shepherded this work for several sessions and Australia (Mr. Matt Johnston) for assisting in the final crucial stages of the revision of the Generic Guidelines. The Meetings also thanked all delegations who had helped in the process over the years.

REVISED TITLES FOR THE SPECIFIC AND GENERIC GUIDELINES

3.7 The Meetings recalled that last year, the governing bodies noted the Scientific Groups' recommendation to use the "official" names of the Generic and Specific Guidelines for display at the London Convention website pending finalization of the revision of the Generic Guidelines. The Meetings noted that the Scientific Groups had approved the revised titles as set out at annex 3 to their report (LC/SG 31/16).

ACTION BY THE GOVERNING BODIES

3.8 As a consequence, the governing bodies adopted the revised titles for the Specific and Generic Guidelines to be displayed on the London Convention website.

REVISED SPECIFIC GUIDELINES FOR THE ASSESSMENT OF INERT, INORGANIC GEOLOGICAL MATERIAL

3.9 The delegation of the United States, in introducing the Revised Specific Guidelines for the Assessment of Inert, Inorganic Geological Material, as shown at annex 5 of document LC/SG 31/16, highlighted that the Scientific Groups commenced the review of these Specific Guidelines in 2007, taking into account the "Eligibility Criteria for Inert, Inorganic Geological

- 17 - LC 30/16

Material" which were adopted in 2006 (LC 28/15, annex 8). The primary changes included updating language to correspond to the Eligibility Criteria and appending them as an annex to the Revised Specific Guidelines.

ACTION BY THE GOVERNING BODIES

- 3.10 In conclusion, the governing bodies adopted the Revised Specific Guidelines for the Assessment of Inert, Inorganic Geological Material, as shown in annex 4 to this report.
- 3.11 The Meetings thanked the United States and in particular Dr. Elizabeth Kim for the efficient leadership shown for this review. The Meetings also thanked all delegations that assisted in the review.

USABILITY AND COMMUNICATION SURVEY OF ALL THE SPECIFIC GUIDELINES

- 3.12 The delegation of South Africa introduced document LC 30/3/2 on the Final survey report on usability and communication of all Specific Guidelines for waste assessment under the London Convention and Protocol, as approved by the Scientific Groups in May 2008, and highlighted that the main conclusion of the report was that, in terms of practical implementation, the Specific Guidelines were considered to have substantial value, although some countries could benefit from additional technical information on case studies, analytical procedures and methods, criteria and procedures for setting limits, monitoring parameters and methods. The delegation stressed the importance of ongoing technical co-operation activities and in particular the 'Barriers to Compliance' Project in this context. The delegation also thanked all the participants for their valuable inputs during the review.
- 3.13 The Meetings noted that the Secretariat had distributed the final survey report to all survey participants in September 2008.

ACTION BY THE GOVERNING BODIES

- 3.14 In conclusion, the governing bodies:
 - .1 endorsed the final survey report on the "Usability and communication of the Specific Guidelines"; and
 - .2 endorsed the Scientific Groups' agreement to take into account the results of the survey when planning further technical co-operation and review activities under their Joint Work Programme.
- 3.15 The Meetings thanked the delegation of South Africa, in particular Dr. Yazeed Petersen, for his excellent leadership and determination on this issue and also thanked all delegations that contributed to the work.

GUIDANCE FOR THE DEVELOPMENT OF ACTION LISTS AND ACTION LEVELS FOR DREDGED MATERIAL

3.16 The delegation of Canada, in introducing document LC 30/3/1, stated that the LC Scientific Group agreed, in 2002, to prepare technical guidance on the development of an Action List under the Generic Guidelines that would assist Contracting Parties in developing

LC 30/16 - 18 -

their own National Action Lists and address the potential effects on human health and the marine environment.

- 3.17 The Meetings noted that the Scientific Groups had finalized their work in May 2008 and that this work had primarily been carried out by the LC Scientific Group's Correspondence Group under the lead, initially of the United States (Dr. Todd Bridges), and subsequently under the lead of Canada (Ms Linda Porebski). The Meetings also noted that the Scientific Groups had recommended that the Guidelines, after their adoption, be published by IMO in 2009 following a sound technical edit by the IMO Publishing Service.
- 3.18 The Meetings agreed to the request by the delegation of Germany to remove its specific country example from the final draft text.

ACTION BY THE GOVERNING BODIES

- 3.19 In conclusion, the governing bodies adopted the "Guidance for the Development of Action Lists and Action Levels for Dredged Material", as amended, and instructed the Secretariat to publish the Guidance in 2009 following a sound technical edit by the IMO Publishing Service.
- 3.20 The Meetings thanked Canada and, in particular, Ms Linda Porebski for her dedicated work in recent years and the United States (Dr. Todd Bridges) who led this review in its early stages. The Meetings also thanked all delegations who assisted in making this an excellent guidance document.

ONGOING WORK

- 3.21 With regard to several key matters of ongoing work, the Meetings:
 - .1 noted that the Groups re-established an intersessional Correspondence Group on the Review of the Specific Guidelines for the Assessment of Bulky Items, under the lead of China, to undertake work as set out in annex 6 to the report of the Scientific Groups, with the aim of completion of this activity in 2009;
 - .2 encouraged Contracting Parties to report their experience with the Guidance for the Development of Action Lists and Action Levels for Dredged Material and with practical implementation of all Specific Guidelines to future sessions of the Groups;
 - .3 encouraged Contracting Parties to report on their experience with biological assessment techniques to future sessions of the Groups (LC/SG 31/16, paragraph 3.44);
 - .4 noted the information provided by the United States on alternative waste management options and encouraged Contracting Parties to submit further case studies to future sessions of the Groups (LC/SG 31/16, paragraphs 3.46 to 3.50); and
 - .5 noted the information provided by the United States that it was updating technical guidance on disposal management measures and encouraged Contracting Parties

- 19 - LC 30/16

to present submissions to future sessions of the Groups (LC/SG 31/16, paragraphs 3.51 and 3.52);

ACTION BY THE GOVERNING BODIES

- 3.22 The governing bodies adopted the report of the 31st session of the LC Scientific Group and the 2nd session of the LP Scientific Group (LC/SG 31/16).
- 3.23 The governing bodies with appreciation that both Scientific Groups had re-elected Dr. Chris Vivian (United Kingdom) as Chairman, and Dr. Gi-Hoon Hong (Republic of Korea) and Ms Linda Porebski (Canada) as 1st Vice-Chairman and 2nd Vice-Chairman, respectively, for the intersessional period and for the next joint session of the Scientific Groups in 2009.

4 OCEAN FERTILIZATION

- 4.1 It was recalled that, in 2007, the governing bodies discussed in detail the request from the Scientific Groups to consider the issue of large-scale ocean iron fertilization with a view to ensuring adequate regulation of such operations, as well as a statement by CPPS on behalf of Chile, Colombia, Ecuador, Panama and Peru, supported by others, expressing their concerns on the same issue. After discussion of a draft statement on ocean fertilization, the Meetings:
 - endorsed the "Statement of Concern" on large-scale fertilization as agreed by the Scientific Groups in June 2007 (LC/SG 30/14, paragraphs 2.23 to 2.25);
 - agreed that the scope of work of the London Convention and Protocol included ocean fertilization, as well as iron fertilization;
 - agreed that the London Convention and Protocol were competent to address this issue due to their general objective to protect and preserve the marine environment from all sources of pollution (Article I of the Convention and Article 2 of the Protocol);
 - .4 agreed that they would further study the issue from the scientific and legal perspectives with a view to its regulation; and
 - .5 recognizing that it was within the purview of each State to consider proposals on a case-by-case basis in accordance with the London Convention and Protocol, urged States to use the utmost caution when considering proposals for large-scale ocean fertilization operations. The governing bodies took the view that, given the present state of knowledge regarding ocean fertilization, such large-scale operations were currently not justified.
- 4.2 Furthermore, it was recalled that the governing bodies developed specific terms of reference for the Scientific Groups to discuss ocean fertilization at their joint session in May 2008 and established the Legal Intersessional Correspondence Group (LICG), under the lead of the United Kingdom, to summarize the legal views by Parties as to whether, and how, the legal framework of the London Convention and Protocol applies to key scenarios on ocean fertilizations. Finally, the governing bodies had developed an approach to communicate the ocean fertilization statement to all Contracting Parties, relevant institutions and the press (LC 29/17, paragraphs 4.14 to 4.29 and annex 6).

LC 30/16 - 20 -

- 4.3 Document LC 30/4 introduced by the delegation of the United Kingdom contained an analysis of the responses it had received to a questionnaire distributed to Contracting Parties on 11 February 2008 that addressed the legal issues associated with ocean fertilization. This analysis had been revised in light of the Scientific Groups' review in May 2008 of the specific issues this had raised. It presented the views of the Legal and Intersessional Correspondence Group on Ocean Fertilization (LICG) in relation to the issue of large-scale ocean fertilization operations and the applicability of the London Convention and Protocol and other legal instruments. The analysis was based on three ocean fertilization scenarios that had been identified: (1) Iron fertilization; (2) Nitrogen and phosphorus fertilization; and (3) Artificial up-welling and the conclusions and recommendation were shown in the paragraphs 28 to 34 of the document. The supporting materials for the analysis were announced in documents LC 30/INF.2 and LC 30/INF.3.
- 4.4 The observer from Greenpeace International expressed the concern in document LC 30/4/1 that certain aspects of the conclusions drawn in paragraphs 28 to 33 of the LICG report may be open to misunderstanding and/or misinterpretation while others appear to be inconsistent with conclusions reached in the report of the Scientific Groups (LC/SG 31/16, annex 2). Specific comments to paragraphs 28, 31 and 32 were provided in the annex of LC 30/4/1.
- 4.5 The representative from UNEP introduced the compilation he had prepared in document LC 30/INF.4 and the addendum thereto of recent international statements, agreements and recommendations regarding ocean fertilization from UNESCO, CBD, GEOHAB, SCOR, GESAMP, the LC-LP Scientific Groups, SOLAS, IPCC and the UN General Assembly.
- The representative from the UNEP/CBD-Secretariat informed the Meetings of the results of the 9th meeting of the Conference of Parties (COP) to the Convention on Biological Diversity with regard ocean fertilization, which was held in May 2008 in Bonn, Germany: "The COP.... requests Parties and urges other Governments, in accordance with the precautionary approach, to ensure that ocean fertilization activities do not take place until there is an adequate scientific basis on which to justify such activities, including assessing associated risks, and a global, transparent and effective control and regulatory mechanism is in place for these activities; with the exception of small scale scientific research studies within coastal waters." The COP also "....requests the Executive Secretary to seek the views of Parties and other Governments and, in consultation with the International Maritime Organization, other relevant organizations, and indigenous and local communities, to compile and synthesize available scientific information on potential impacts of direct human-induced ocean fertilization on marine biodiversity..." Finally, the COP had requested the Executive Secretary to disseminate the results of the ongoing scientific and legal analysis under the London Convention and Protocol and other relevant scientific and technical information to the 14th meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA), tentatively scheduled for May 2010.
- 4.7 The delegation of Australia stated that Australia planned to pursue an amendment to the London Protocol to ensure that legitimate non-commercial scientific research could occur, provided it was effectively regulated and met an impact threshold test appropriate for research activities. As this would effectively prohibit commercial operations, a review should be conducted once sufficient information was available to determine the likelihood of unacceptable environmental impacts. The delegation believed an amendment was required to ensure that the London Protocol would be a global, transparent and effective control and regulatory mechanism with regard to ocean fertilization.

- 21 - LC 30/16

- 4.8 The delegation of Vanuatu stated that it firmly believed that global warming must be solved at the source, the effects of large scale iron fertilization experiments could be catastrophic and the delegation expressed its strong opposition to manipulating ocean ecosystems in this manner. The full statement of the delegation is reproduced in annex 5 to this report.
- 4.9 After an initial exchange of views, the meetings embarked first on the development of general objectives relating to the management of ocean fertilization activities based on:
 - .1 the conclusions and recommendation in the LICG report and the comments thereto (LC 30/4 and LC 30/4/1); and
 - .2 the conclusions and recommendations in the report of the Working Group on Ocean Fertilization under the Scientific Groups (LC/SG 31/16, annex 2).
- 4.10 The Meetings established the Ocean Fertilization Working Group under the chairmanship of Dr. Chris Vivian (United Kingdom) which was charged, in an initial session, to:
 - .1 exchange general positions and views of parties as relating to ocean fertilization under the London Protocol and Convention;
 - .2 define what is meant by "regulation"; and
 - .3 consider the recommendation in paragraph 34 of document LC 30/4 and advise on the suitability or otherwise of applicability of the provisions listed¹ to interpreting the phrase "contrary to the aims of the London Protocol/Convention" in relation to ocean fertilization.
- 4.11 Based on a discussion in plenary on the outcome of the Ocean Fertilization Working Group, it was reconvened again and was charged to:
 - .1 continue exchanging views and positions on ocean fertilization;
 - .2 explore options for regulation; and
 - .3 draft text that could deliver the objectives agreed by the governing bodies.
- 4.12 In discussing the results of the Working Group the governing bodies agreed to draft a resolution on ocean fertilization.

OUTCOME OF THE OCEAN FERTILIZATION WORKING GROUP (LC 30/WP.6)

- 4.13 After an intensive debate on the draft resolution prepared by the Working Group (LC 30/WP.6), the governing bodies adopted resolution LC-LP.1 (2008) on the regulation of ocean fertilization, as shown in annex 6 to this report.
- 4.14 In addition, the Meeting of Contracting Parties agreed to further consider a potential legally binding resolution or an amendment to the London Protocol at its next session in 2009.

٠

These being, Articles I, II, VII.2, VII.3 and XII for the Convention and Article 1.10, Article 2, Article 3.1, and Article 3.3 for the Protocol.

LC 30/16 - 22 -

- 4.15 The Meeting of Contracting Parties identified in this regard the need for preparatory work in the intersessional period both on technical/scientific issues, as well as on legal/administrative issues related to ocean fertilization, and requested the Secretariat to make the necessary arrangements in consultation with the Bureau and inform all delegations as soon as possible thereafter.
- 4.16 Furthermore, the governing bodies requested the Scientific Groups with the assistance of experts, as required, and in co-operation with relevant international organizations, as appropriate:
 - .1 to prepare a document, for the information of all Contracting Parties, summarizing the current state of knowledge on ocean fertilization, relevant to assessing impacts on the marine environment, taking into account the work done on this issue in other fora; and
 - .2 to provide updates to this document from time to time, as new information becomes available.
- 4.17 Recognizing also the benefits of early and regular exchanges of information on ocean fertilization, the governing bodies:
 - .1 invited Contracting Parties to keep the Secretariat informed of any research proposals they are assessing and to further advise it of their decisions on these proposals;
 - .2 requested the Secretariat to circulate this information to the Contracting Parties on a regular basis.
- 4.18 Finally, the governing bodies instructed the Secretariat that, over and beyond its routine distribution of the full report, the main outcomes of this session, including the ocean fertilization resolution should be distributed:
 - .1 in a circular letter to all London Convention and Protocol focal points in national administrations based on the short report to be prepared for the IMO Council (C 101/9);
 - .2 to all relevant institutions, including the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR); all regional fisheries management organizations; Antarctic Treaty bodies; UNESCO-IOC; the United Nations General Assembly (UNGA); UNFCCC; the Convention on Biological Diversity (UNEP/CBD; CPPS; the Scientific Committee on Oceanic Research (SCOR); GESAMP; the Inter-Governmental Panel on Climate Change (IPCC); and UN-Oceans; and
 - .3 in an IMO press release².

The IMO press release was distributed on 11 November 2008.

- 23 - LC 30/16

5 CO₂ SEQUESTRATION IN SUB-SEABED GEOLOGICAL FORMATIONS

DEVELOPMENT OF A SPECIFIC REPORTING FORMAT FOR CO₂ SEQUESTRATION PROJECTS

- 5.1 The Meeting of Contracting Parties noted that further to the 2006 amendments to Annex 1 to the London Protocol to regulate CO₂ sequestration in sub-seabed geological formations (resolution LP.1(1)), it adopted, in 2007, the "Specific Guidelines for Assessment of Carbon Dioxide Streams for Disposal into Sub-seabed Geological Formations³" to accompany these amendments. The Guidelines were regarded as a "living document" and it was agreed to keep them under review and update them in five years' time, or earlier, as warranted in light of new developments (LC 29/17, paragraph 4.13).
- 5.2 The Meeting also recalled that it had instructed the LP Scientific Group to develop a specific reporting format for CO_2 sequestration into sub-seabed geological formations. In May 2008, a draft format had been prepared under the lead of Norway, as set out in annex 8 of the report of the Scientific Groups (LC/SG 31/16) and it was agreed that the format should be further developed by an intersessional correspondence group coordinated by Norway.
- 5.3 The delegation of Norway informed the Meeting that the draft reporting format had indeed been updated in light of the discussion at the LP Scientific Group meeting and by input received through the correspondence group. In particular, the format had been updated with respect to monitoring and cumulative quantity of CO₂ streams taking into account any leakages and results of monitoring.
- 5.4 Several delegations expressed concerns that the draft format, presented by Norway, was not fully consistent with the electronic reporting format for all waste categories being considered for adoption at this session (see Chapter 6 of this report). The format should also be compatible with the format used for the database under development, irrespective of whether all the information in the draft format, or all the information needed for reporting on "CO₂ Streams for Disposal into Sub-seabed Geological Formations" could be included in the database from its inception.
- 5.5 The Meeting agreed that the same format should be used for all waste categories and that the draft reporting format for CO₂ streams should supplement the information in Tables 1 and 2 under the reporting format described in paragraph 5.4 above.
- 5.6 The Meeting established a drafting group, under the Chairmanship of Mr. Øyvind Christophersen (Norway), and instructed it to:
 - .1 review the current revised draft format in light of the comments made in plenary; and
 - .2 present a written report to plenary on Thursday, 30 October 2008.

Outcome of the Drafting Group on the CO_2 Sequestration Reporting Format (LC 30/WP.4)

5.7 The Drafting Group agreed, in order not to duplicate information already included in Tables 1 and 2 of the electronic reporting format, that it would be efficient to include a new waste category row in Table 1 and a new column in Table 2 for Carbon Dioxide Streams. The Group agreed to consequential editorial amendments to the tables and to include footnotes on Carbon Dioxide Streams for clarification.

-

In short, these guidelines are called the "CO₂ Sequestration Guidelines".

LC 30/16 - 24 -

- 5.8 The Group also considered the need for specific information about CO₂ storage projects to supplement Tables 1 and 2 and developed a Table 3 to this effect based on the draft submitted by Norway.
- 5.9 The Group noted that, preferably, Table 3 should be part of the electronic reporting format and the database under development and agreed to recommend that this should be investigated further.

ACTION BY THE MEETING OF CONTRACTING PARTIES

- 5.10 Having considered the report of the Drafting Group on the CO₂ Sequestration Reporting Format (LC 30/WP.4), the Meeting of Contracting Parties approved the report in general and, in particular:
 - .1 adopted the proposed amendments to Tables 1 and 2;
 - .2 adopted the proposed Table 3; and
 - .3 agreed to consider the inclusion of Table 3 in the electronic reporting format and the database under development (see further paragraph 6.21 and annex 8 of this report).
- 5.11 The Meeting expressed its appreciation to the Chairman of the drafting group, Mr. Øyvind Christophersen (Norway) for his diligent work on the format and to all who had contributed to this outcome.

CO2 SEQUESTRATION IN TRANSBOUNDARY SUB-SEABED GEOLOGICAL FORMATIONS

- 5.12 The Meeting of Contracting Parties recalled that, while preparing the CO₂ Sequestration Guidelines in the period from 2006 to 2007, the LP Scientific Group had identified that the issue of sequestration in transboundary sub-seabed geological formations needed further consideration. If a CO₂ stream injected into a sub-seabed geological formation is expected to cross a jurisdictional boundary between two or more countries, regulators should take special care to notify and seek input from those countries before issuing the permit, in order to ensure compliance with appropriate Action Lists or other relevant regulations. It had been agreed that the transboundary issue had major implications that should first be resolved by the governing bodies before any guidance on this issue could be included in the CO₂ Sequestration Guidelines (LC/SG 30/14, paragraph 2.5).
- 5.13 The Meeting also recalled that in 2007 it had established the Legal and Technical Working Group on Transboundary CO₂ Sequestration Issues; adopted its terms of reference; and accepted, with appreciation, the offer of Germany to host the planned meeting of that working group in February 2008 (LC 29/17, paragraph 4.9).
- 5.14 The Meeting considered the report of the first Meeting of the Legal and Technical Working Group on Transboundary CO₂ Sequestration Issues (LP/CO2 1/8), approved its report in general and in particular noted that:
 - .1 the Group had met from 25 to 27 February 2008 in Bonn, Germany;

- 25 - LC 30/16

- .2 the Group had agreed on basic clarifications/assumptions for the further work as described in Chapter 2 of its report;
- the Group had taken the view that Article 6 of the London Protocol prohibits the export of CO₂ streams from the jurisdiction of one Contracting Party to any other country, whether it was another Contracting Party or non-Contracting Party. It also felt that "export" would include any movement from one Contracting Party to another country for disposal in that other country regardless of any commercial basis for that transfer (LP/CO2 1/8, paragraphs 3.1 to 3.9). Consequently, it was felt that an amendment to Article 6 was required in order to permit such movements and the text for a possible amendment was developed, as shown in its report (LP/CO2 1/8, paragraphs 3.11 to 3.15 and annex 3);
- the Group had considered, without reaching a conclusion, whether Article 6 would apply in cases where CO₂ is brought out of the jurisdiction of one State without being brought into the jurisdiction of another State, i.e., transfer to the high seas (LP/CO2 1/8, paragraph 3.10);
- the Group considered transboundary migration of disposed CO₂ streams. In the case of *deliberate* migration across boundaries, the Group reached no conclusion as to whether such migration would constitute an export within the terms of Article 6. There was general agreement that an *unintended* migration of CO₂ streams within sub-seabed geological formations would not constitute an export under Article 6 (LP/CO2 1/8, paragraphs 3.16 to 3.21);
- the Group had developed explanatory texts for the 2007 CO₂ Sequestration Guidelines, in case amendments were adopted and had agreed to recommend that the LP Scientific Group should take into account the suggestions when it developed the reporting requirements on CO₂ sequestration (LP/CO2 1/8, paragraphs 3.22 to 3.28);
- .7 the Group had concluded that there was no need to develop additional monitoring requirements as, in the event of co-operation, the Contracting Parties concerned would have to apply the current requirements individually, and to the same standard (Chapter 4 of LP/CO2 1/8); and
- .8 as the representation of London Protocol Parties had been relatively low in the Group (9 of the 33 Parties then registered), its conclusions and recommendations might not be shared by all Parties.
- 5.15 The Meeting expressed its appreciation to the Chairman of the Working Group, Ms Dagmara Berbalk (Germany) for her excellent chairmanship, to the German Government for its kind hospitality and the support it provided which had contributed greatly to a successful and productive meeting, and to the German delegation for its leadership on this issue, resulting in a thorough report of the Working Group.
- 5.16 The Meeting noted the specific recommendation of the Scientific Groups, following their review of the report of the Working Group (LP/CO2 1/8) in May 2008, to prepare a "justification document" for a requirement to amend Article 6 of the Protocol that could include scientific and technical aspects (LC 30/3, action point .21)

LC 30/16 - 26 -

- 5.17 Several LP Parties expressed the view that it was too early to aim at amending Article 6 of the Protocol and that other options, such as an interpretative resolution, should be explored further before a decision was taken.
- 5.18 Other LP Parties supported the need for amending Article 6 and reasoned that the draft text proposed by the Working Group was balanced. It was argued that many countries did not have adequate storage sites within their territorial waters or EEZ and that large-scale projects may be more cost-effective than a number of smaller projects, making transboundary transport more relevant. It was noted that the current wording of Article 6 could be in conflict with other international instruments applicable to some Parties, such as the draft European Community Directive on carbon capture and storage.
- 5.19 The Meeting noted that the relation and possible conflict with the Basel Convention needed to be considered and explored further and requested the Secretariat to liaise with the Basel Convention Secretariat on the matter and report back, as appropriate. The need to distinguish between migration and export was also noted in this respect.
- 5.20 The Meeting further noted that no consensus view existed on the need for amending Article 6 or whether an interpretive resolution would be sufficient, without excluding the possibility of amending Article 6 at a later stage.
- 5.21 The Meeting agreed to continue consideration of the matter and established a Working Group under the lead of Ms Dagmara Berbalk (Germany). The Group was instructed, taking into account the comments made in plenary, to:
 - .1 review in detail the report of the first Meeting of the Legal and Technical Working Group on Transboundary CO₂ Sequestration Issues (LP/CO2 1/8);
 - .2 identify arrangements or further work, such as a second intersessional meeting, a correspondence group or a workshop, so that an informed debate could be conducted amongst LP Parties with a view to reaching final agreement at the next Meeting of Contracting Parties in 2009; and
 - .3 present a report to plenary on Thursday, 30 October 2008.

OUTCOME OF THE WORKING GROUP ON TRANSBOUNDARY CO2 SEQUESTRATION ISSUES

- 5.22 The Chairman of the Working Group on Transboundary CO₂ Sequestration Issues, Ms Dagmara Berbalk (Germany), informed the Meeting that it had carried out the work as instructed. The Working Group reconfirmed that the aim to allow for the transboundary movement of CO₂ streams was justified as a climate change mitigation measure. It recommended that this Meeting of Contracting Parties should give the political signal that the London Protocol should not constitute a barrier to the transboundary movement of CO₂ streams and that in order to come to the best political and legal solution to achieve this aim further work would be needed.
- 5.23 It was therefore recommended to set up an intersessional correspondence group which would consider the following points:

- 27 - LC 30/16

- .1 the option of an amendment of Article 6 of the Protocol on the basis of the draft from the intersessional Working Group (LP/CO2/1/8, annex 3), or an interpretative resolution, or a combination of the two;
- the underlying policy objectives taking into account those which were discussed intersessionally (1. allowing transboundary movement between Contracting Parties and also between Contracting Parties and Non-Contracting Parties; 2. the Annex 2 requirements of the Protocol should also be met by Non-Contracting Parties; 3. shared responsibility; 4. prior informed consent regarding the export), as well as the CO₂ Sequestration Guidelines and the "Risk Assessment and Management Framework for CO₂ Sequestration in Sub-seabed Geological Structures (LC/SG-CO2 1/7, annex 3);
- .3 the scope should the transboundary movement also be allowed to Non-Contracting Parties?;
- .4 obtaining a clear understanding on what export means or should mean in this context;
- .5 migration how should this be dealt with, does migration fall under the definition of export?; and
- the relevance of the Basel Convention⁴ and its relation to the London Protocol (does the Basel Convention apply?) Contracting Parties that are members of the European Union would also have to take into account the CCS Directive being prepared (see paragraph 5.30 below).

ACTION BY THE MEETING OF CONTRACTING PARTIES

- 5.24 After a short discussion the Meeting of Contracting Parties endorsed all the recommendations of the Working Group and adopted its report.
- 5.25 The intersessional Correspondence Group on Transboundary CO₂ Sequestration Issues would be led by Germany⁵ and the following delegations indicated that they wished to participate in its work: Australia, Brazil, Canada, China, Denmark, France, Germany, Japan, Netherlands, Norway, Saudi Arabia, South Africa, Sweden, United Kingdom, United States, OECD/IEA, and Greenpeace International.

EXPERIENCES WITH CO₂ SEQUESTRATION PROJECTS

- 5.26 The governing bodies acknowledged again the importance of Contracting Parties keeping them informed, on a regular basis, of their experiences with CO_2 sequestration technologies and their application.
- 5.27 The Meeting noted with interest the information provided by the delegation of Norway where it was underlined that Carbon Capture and Storage (CCS) was not only relevant for fossil fuel power plants, but also for other large point sources of CO₂, such as industry and petroleum

-

The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, 1989.

Contact point to be provided separately

LC 30/16 - 28 -

production. The IPCC special report 2005 identified three full-scale running CCS projects in the world at that time; one of which was the Norwegian Sleipner gas field which had been running for more than ten years. In April 2008, a second Norwegian CCS project at the Snøhvit gas field started injection of CO₂ into the sub-seabed geological formation Tubåen. This project would inject about 0.7 million tonnes of CO₂ annually when it comes into full operation. Furthermore, the planning of two additional CCS projects connected to gas power stations were moving forward, including considerations of optional storage formations. The CO₂ Sequestration Guidelines developed under the London Protocol had been very helpful to facilitate the process in this regard.

- 5.28 The Meeting noted with interest the information provided by the delegation of the United States that it had a number of efforts underway relevant to CO₂ sequestration, in particular that:
 - .1 there are currently eight to ten large-scale CO₂ geological sequestration pilot projects underway within the United States;
 - .2 the United States Environmental Protection Agency (USEPA) was developing regulations for CO₂ geological sequestration through its Underground Injection Control Programme, which was focused on drinking water protection;
 - .3 the USEPA was also looking at the broad risk management of CO₂ geological sequestration through the development of a Vulnerability Evaluation Framework; this framework was applicable to sub-seabed considerations, as it addressed all potential impacts from geological sequestration;
 - .4 research efforts to evaluate the technical aspects of CO₂ geological sequestration were currently underway; and
 - .5 additionally, through the National Energy Technology Laboratory (NETL) Carbon Sequestration Core R&D Programme of the Department of Energy, there were numerous international collaborations.
- 5.29 The delegation of the United States also provided the following background information:
 - .1 **Pilot Projects**. USEPA released in March 2007 the "Class V Experimental Technology Well Guidance for Pilot Geologic Sequestration Projects". This Guidance was intended to address only the experimental pilot projects anticipated to be brought online in advance of full-scale operations over the next several years;
 - .2 **Proposed regulation**. USEPA proposed on 15 July 2008 a draft regulation to create federal requirements to allow for permitting of injection of carbon dioxide underground for the purpose of geological sequestration. This new proposed rule would create a new class of injection wells under the authority of the Safe Drinking Water Act's (SDWA) Underground Injection Control (UIC) programme;
 - Vulnerability Evaluation Framework for Geologic Sequestration of Carbon Dioxide. A large body of literature indicated that geological sequestration of carbon dioxide is a viable technology that could be conducted in a safe manner when coupled with a comprehensive approach to ensure protection of human health and the environment. Nonetheless, there were potential risks and

- 29 - LC 30/16

uncertainties associated with geological sequestration. To systematically identify those conditions that could increase the potential for adverse impacts from geological sequestration, the USEPA had developed the Vulnerability Evaluation Framework. This Framework can be accessed at: http://www.epa.gov/climatechange/emissions/co2 gs eval risks.html; and

- Status of the Department of Energy Regional Partnership Geological Sequestration Programme. The Department of Energy has formed a nationwide network of regional partnerships to help determine the best approaches for capturing and permanently storing gases that can contribute to global climate change. The Regional Carbon Sequestration Partnerships are a government/industry effort tasked with determining the most suitable technologies, regulations, and infrastructure needs for carbon capture, storage, and sequestration in different areas of the United States. More information could be obtained by accessing https://doe.netl.gov/sequestration.
- 5.30 The observer from IEA/OECD informed the Meetings that the European Commission proposed on 23 January 2008 a draft European Union Directive on carbon capture and storage aimed at: (1) creation of an enabling legal framework; (2) ensuring environmental regulation of CCS; and (3) removing regulatory barriers. This EU Directive took into account the 2006 amendment to Annex 1 to the London Protocol which itself had enabled a similar amendment to the OSPAR Convention, and it incorporated many of the regulatory principles for CCS which were established by the Scientific Groups when they developed the Risk Assessment and Management Framework and the CO₂ Sequestration Guidelines in the period 2005 2007. This demonstrated the positive impact that the London Convention and Protocol had had.
- 5.31 The observer also informed the Meetings that IEA had created an International CCS Regulators' Network, aimed at assisting regulatory authorities in the development and application of regulation for CCS. The first meeting of the Network was held from 13 to 14 May 2008, and it is proceeding with a series of regular web-conferences. The first two web-conferences would focus on transport safety and on CCS demonstration projects. More information was available at http://www.iea.org/textbase/subjectqueries/ccs_network.asp and participation would be open and free to all.
- 5.32 The Meetings were furthermore informed that the IEA Greenhouse Gas R&D Programme had held a Workshop on the environmental impacts of leakage, from 15 to 17 September 2008. This Workshop included discussion on marine impacts. One significant conclusion was the benefit of learning from natural CO₂ leakages, both offshore and onshore, and a further workshop was proposed on this topic. A report of the September Workshop findings and presentations would be produced and would be posted on http://www.ieagreen.org.uk/.
- 5.33 Finally, the observer expressed his compliments to the Meetings for their role in raising the awareness of the problem of ocean acidification, which was now getting more widely recognized e.g., in IPCC's 4th Assessment Report, and in business newspapers.
- 5.34 The Meetings thanked all delegations for the information they had shared and agreed that it was important to receive relevant and up-to-date information on all scientific, technical as well as legal, aspects of CO₂ sequestration projects and encouraged Contracting Parties to inform them on relevant developments, if any, through submissions to the next session.

LC 30/16 - 30 -

6 COMPLIANCE ISSUES

FIRST SESSION OF THE COMPLIANCE GROUP (LP-CG): ELECTION OF MEMBERS

- 6.1 It was recalled that the 2nd Meeting of Contracting Parties adopted in 2007 the Compliance Procedures and Mechanisms (CPM) pursuant to Article 11 of the London Protocol and agreed that the 1st session of the Compliance Group should be held in parallel with this session.
- 6.2 The Secretariat informed the meetings that it had been in regular contact in 2008 with national focal points of Contracting Parties to the London Protocol to assist them with the nomination process of candidates for the Compliance Group. With the assistance of China, Norway and South Africa as co-ordinators for their respective UN groupings, the Secretariat had received on Friday, 24 October 2008, only seven nominations, one of which had been withdrawn since. It was nonetheless important to convene the first meeting of the Compliance Group to enable its work to proceed. Some slight adjustments would therefore be necessary by an early decision of this Meeting of Contracting Parties to achieve this.

INTRODUCTION AND BACKGROUND FOR A DRAFT DECISION ON ELECTIONS

- 6.3 The CPM provide that the Compliance Group shall be limited in size to 15 members (paragraph 3.1). This did not mean that the Compliance Group needed to have 15 members to begin its work. Therefore under the current rules, the Compliance Group could operate with the number ultimately elected. During the negotiation of the CPM the assumption was that 15 members would be nominated and elected, and paragraph 3.5 of the CPM therefore provided that three members from each of the five UN regions shall be elected for one, two and three terms. At this time, none of the five UN regions had nominated three candidates.
- 6.4 The *first* question was how to constitute the slate: (1) should extra nominees be taken from other regions to fill the slate to 15, regardless of how this affected regional balance? (2) should each region be capped at three nominations and the regions which had a shortfall participate with the reduced number (such members that were nominated from regions without a full slate could be encouraged to take the two and three-term nominations); (3) option 2, but with a procedure for adding members during the first year so that the member could participate intersessionally, or at the 2nd session of the Compliance Group. It should be noted that in developing the CPM, the Working Group chose specifically not to allow for Contracting Parties to replace nominees during the year, given the annual meetings and the importance of membership being elected by the Meeting of Contracting Parties, but this could be altered for the initial elections, given the current special situation.
- 6.5 The *second* question, once the above was decided, was how to achieve this decision in conformity with the CPM. Since the shortfall in nominations meant that paragraph 3.5 cannot be carried out as adopted, the simplest option to carry out the option chosen under paragraph 6.4 above, would be to: first, adopt a decision that displaces paragraph 3.5 for the current elections only; second, request the Compliance Group to study whether an amendment to paragraph 3.5 of the procedures is necessary, and if necessary, to draft an amendment as part of the work at its first meeting, which would then be referred to the Meeting of Contracting Parties for approval with the rest of its first report.
- 6.6 Paragraph 3.5 also defined "term" to mean the period that begins at the end of one ordinary Meeting of Contracting Parties and ends at its next ordinary session. Because a slate was not elected at the 2nd Meeting of Contracting Parties, for purposes of holding the Compliance

- 31 - LC 30/16

Group meeting at the beginning of the Meeting of Contracting Parties, it would be necessary to indicate that for the initial slate, "term" meant the period commencing at the beginning of this Meeting of Contracting Parties and finishing at the end of its next ordinary session in 2009 • the latter to avoid requiring a second election the same week. This meant that the first members with one term would be participants at two meetings of the Compliance Group. At the 4th Meeting of Contracting Parties in 2009, a new slate of members for three terms would be elected to replace one-term outgoing members, and would also fill any vacancies. This would provide for the staggering contemplated in paragraph 3.5, although with irregular numbers from regions for the initial elections, the Compliance Group could also be asked to examine this question to ensure that there was appropriate staggering in each of the regions for the future.

6.7 Thus, the following draft decision proposed by the Secretariat did not amend the current CPM, but provided that notwithstanding these procedures the initial elections would be conducted in a special way:

"Notwithstanding the Compliance Procedures and Mechanisms, <u>for purposes of the initial</u> <u>elections of the Compliance Group at the 3rd Meeting of Contracting Parties:</u>

.1 the following members are elected to the Compliance Group:

Mr. Mongezi Nqoro (nominated by South Africa)	for 1 term
Prof. Hisakazu Kato (nominated by Japan)	for 2 terms
Ms Zhou Qian (nominated by China)	for 3 terms
Ms Marinka Bogdanova (nominated by Bulgaria)	for 2 terms
Ms Anne Daniel (nominated by Canada)	for 3 terms
Captain Federico Crescenzi (nominated by Italy)	for 2 terms

- .2 the word "term" means "the period that commences at the beginning of the 3rd Meeting of Contracting Parties after the elections and finishes at the end of the 4th Meeting of Contracting Parties";
- .3 the Compliance Group immediately begins its work today, Monday, 27 October 2008. The Compliance Group should, in addition to its other work, examine the text of paragraph 3.5 of the Compliance Procedures and Mechanisms to determine whether there needs to be any change to its text. The Compliance Group shall make recommendations in this regard in its first report to the Meeting of Contracting Parties; and
- .4 any region which has not provided three members at the 3rd Meeting of Contracting Parties may do so in the intersessional period with the approval of the Chairman and Vice-Chairmen of the Meeting of Contracting Parties."
- 6.8 In the discussion of this proposed decision, doubts were expressed whether paragraph 3.5 of the CPM would need to be reviewed at all at this session.
- 6.9 It was noted that the expression "examination", didn't necessarily mean amending paragraph 3.5. With acceptance of this clarification, the Meeting of Contracting Parties adopted the decision as shown in paragraph 6.7 above.

LC 30/16 - 32 -

CONSIDERATION OF THE REPORT OF THE 1ST MEETING OF THE COMPLIANCE GROUP

- 6.10 The Chairman of the Compliance Group, Ms Anne Daniel (Canada) introduced the report of the 1st meeting of the Compliance Group (LC 30/WP.2), which is attached as annex 7 to this report.
- 6.11 Several delegations raised the question about the participation of observers in the intersessional work of the Group. In the ensuing discussions, the Meeting agreed that paragraph 3.8 of the CPM (LC 29/17, annex 7) should apply. Hence, any Party or non-Party observer may attend meetings of the Compliance Group (except in the case of individual submissions as per paragraph 3.8 of the CPM), while intersessional communications would be kept restricted to Compliance Group members. This may also serve as a further incentive for UN regional groups to nominate members to the Compliance Group, in order to achieve a full slate of members as soon as possible.
- 6.12 The delegation of the Philippines questioned whether it was necessary to make the Group's reports available in all six UN languages and suggested that the Rules of Procedure that apply to other IMO bodies would apply here too. The Secretariat informed the meeting that by attaching the report of the Compliance Group to this report of the Meeting of Contracting Parties, it would serve to raise awareness of its work in this initial phase. If needed, for example if the reports of the Group become much longer, this could be revisited.
- 6.13 After these initial discussions, the Meeting of Contracting Parties agreed to accept the report in general, and all the recommendations of the Compliance Group, as found in paragraphs 5.1, 5.2, 5.4, 6.2, 6.3, 6.6, 8.1, and 8.2 of annex 7.
- 6.14 The Meeting of Contracting Parties further approved the recommended future work programme of the Compliance Group, as proposed in paragraph 7.2 of annex 7 (see also paragraph 6.27 below).
- 6.15 The Meeting acknowledged that the Compliance Group had made a good start and expressed its appreciation to Ms Anne Daniel and all the members of the Compliance Group for their excellent work to develop a plan of action.

IMPLEMENTATION OF THE STRATEGY TO IMPROVE REPORTING UNDER THE LONDON CONVENTION AND PROTOCOL

6.16 The Secretariat informed the Meetings on the status of the following elements of the "Strategy to improve reporting under the London Convention and Protocol":

.1 Dumping Reports

The Secretariat, as instructed, had written to all countries listed last year as not having reported for more than five years (that is to National Focal Contact points or to Permanent Representatives to IMO, if unknown). The results are described in paragraphs 6.22 to 6.25 below. In addition, the Secretariat had circulated the 2004 compilation report on dumping permits and the new invitation to report on dumping permits issued in 2007 and had placed the Circulars on the London Convention website. It had also forwarded a final draft compilation report for permits issued in 2005 for consideration by the Scientific Groups in May 2008, the outcome of which is described in paragraph 6.30 below.

- 33 - LC 30/16

.2 Electronic reporting form (E-Form)

The Scientific Groups, having noted that no new issues were raised by delegations in the intersessional period, recommended to end the trial and continue using the existing LC/LP E-Form, as amended. The Groups also recommended a review of the E-Form once the OSPAR Commission had completed a review of its reporting format or earlier if deemed necessary. The Scientific Groups also took note of the information presented by the representative of UNEP/MAP regarding the development of a 'common system' for data exchange and formats, which when completed, may provide an opportunity to improve the current reporting format under the London Convention and Protocol.

.3 Development of a database on dumping reports

In May 2008, the Chairman of the Correspondence Group on Assessment of Dumping Reports, Mrs. Brigitte Lauwaert (Belgium) informed the Scientific Groups that progress in developing the web-based repository of dumping activities had been delayed due to personnel changes in her Administration, but that the database would be finalized in the near future.

.4 Incident Information Reports

The Secretariat had not received any reports of observed dumping incidents⁶ in the intersessional period.

- 6.17 Mrs. Lauwaert informed the Meetings that two people in her administration were currently finalizing work on the database on dumping reports and that a report on this activity and a demonstration of the database would be provided to the next session of the Scientific Groups.
- 6.18 With regard to the E-Form, Mrs. Lauwaert indicated that the OSPAR and HELCOM Commissions would finalize reviews of their respective reporting formats in the near future and that the recommendations for amendments would be forwarded to the Scientific Groups for consideration.
- 6.19 In response to the question by the delegation of Nigeria regarding the possible integration of this database and the IMO Global Integrated Shipping Information System (GISIS), the Secretariat suggested that the governing bodies could consider this aspect once the database was functioning and some experience with it had been gained.
- 6.20 The Meetings expressed their appreciation to Mrs. Lauwaert for the considerable work conducted and invited her to provide a progress report on the development of the database to the next session of the governing bodies.

-

The "Incident Information Reports" were circulated to Contracting Parties in 2003 under circular LC.2/Circ.430 and were placed on the LC website in 2007.

LC 30/16 - 34 -

6.21 In conclusion, the governing bodies:

- adopted the "Electronic Form for Annual Reporting on Dumping Operations at Sea" (E-Form), with inclusion of the new Table 3 "Details of Carbon Dioxide Streams Storage Sites and Permits" (see paragraph 5.10 above) and declared the trial phase to be over;
- .2 encouraged Contracting Parties to use this E-Form as much as possible when reporting their dumping activities, until further notice;
- .3 reassured Contracting Parties who wish to continue reporting in paper form, that this would also be acceptable. If any Contracting Parties had difficulties, the Secretariat would be available to assist; and
- .4 agreed to review the London Convention and Protocol reporting formats once the work being undertaken by the OSPAR and HELCOM Commissions and UNEP/MAP on their reporting formats was completed.

Compliance with the notification and reporting requirements under Article VI(4) of the Convention and Article 9.4 of the Protocol

- 6.22 The Secretariat introduced documents LC 30/6/1 and LC 30/6/1/Corr.1 and informed the Meetings that annex 1 to LC 30/6/1 showed the extent to which Contracting Parties had notified the Secretariat of the annual reports on their dumping activities from 1976 up to and including 2007.
- 6.23 The Meetings noted that since the issuance of this document on 18 August 2008 additional dumping reports were provided by: Australia, Brazil, China, Costa Rica, Egypt, Finland, France, Germany, Japan, Kiribati, the Netherlands, New Zealand, Poland, the Seychelles, South Africa, Spain, Sweden, the United States and Vanuatu. The Meetings also noted that some OSPAR countries' dumping reports for 2007 had yet to be included as they were currently being finalized by the OSPAR Secretariat.
- 6.24 With respect to annex 2 of document LC 30/6/1 listing the 32 Contracting Parties that had not reported in the last five years, the Meetings noted that Costa Rica, Kiribati and the Seychelles had recently provided their reports, thus leaving a total of 29 non-reporting Contracting Parties. This document had also been distributed to the LP Compliance Group.
- 6.25 The Meetings also noted that since the entry into force of the Convention in 1975, the overall response rate of Contracting Parties remained fairly constant at a level of about 53%. While this was a slight improvement over recent years, the Meetings agreed that this was still too low.
- 6.26 Several delegations suggested in this regard that the IMO permanent representatives, other missions in London and the UNEP Regional Seas Programmes could be mobilized to increase the uptake of, and response to, the invitation to report on dumping activities. Some delegations also suggested that this low response rate issue and the review of the reports themselves could be passed to the Compliance Group for their review and advice.

- 35 - LC 30/16

- 6.27 Having noted that the Compliance Group would review the effectiveness of the London Protocol in protecting the marine environment from dumping activities and that it could help to identify the reasons for the low overall response rate of reporting dumping activities of Contracting Parties to the London Protocol, the Meetings of Contracting Parties agreed to add the following points to item 3 of the Future Work Programme of the Compliance Group:
 - .1 identify and review the factors contributing to the difficulties experienced by Contracting Parties in fulfilling their reporting obligations under Art. 9.4 of the Protocol;
 - .2 identify options to address those factors;
 - .3 report to the Meeting of Contracting Parties with recommendations for improving the rate of reporting under the Protocol; and
 - .4 because the Contracting Parties to the London Convention recognize that this review may be useful to them as well, they request that the LP Compliance Group also consider the applicability of these options to the rate of reporting under Article VI(4) of the London Convention.
- 6.28 The Meeting of Contracting Parties agreed that the Compliance Group would start to address the above issues intersessionally for further discussion at its next session.
- 6.29 In conclusion, both governing bodies:
 - .1 urged all Contracting Parties, if they have not done so, to provide the Secretariat with their annual dumping reports as soon as possible; and
 - .2 encouraged States who were having difficulties in reporting on their dumping activities to contact neighbouring countries, bilaterally, or via regional agreements to which they are a Party and request assistance in developing these reports.

REVIEW OF THE FINAL DRAFT COMPILATION REPORT ON DUMPING PERMITS ISSUED IN 2005

6.30 The Secretariat informed the Meetings that document LC 30/WP.1 set out the final draft compilation report for data on permits issued in 2005 which the Secretariat had updated following the review by the Scientific Groups in May 2008. It was envisaged to release the final 2005 report following a quality check on data before the end of January 2009 and post it on the London Convention website as soon as practical thereafter. The Secretariat would also submit a first draft compilation report for 2006 for consideration by the Correspondence Group on Assessment of Dumping Reports after which it would be submitted to the next session of the Scientific Groups in 2009 for their review.

ACTION BY THE GOVERNING BODIES

- 6.31 In conclusion, the governing bodies:
 - .1 urged all Contracting Parties, if they had not done so, to provide the Secretariat with the reports on their dumping activities in 2006, as soon as convenient;

LC 30/16 - 36 -

.2 instructed the Secretariat to:

- .1 publish the summary report on permits issued in 2005 in January 2009;
- .2 submit a draft summary report on permits issued in 2006 to the Correspondence Group on Assessment of Dumping Reports for its review; and
- .3 invited the Correspondence Group on Assessment of Dumping Reports to report on its review of the draft 2006 compilation report to the next session of the Scientific Groups in May 2009.

REPORTS ON COMPLIANCE MONITORING ACTIVITIES

- 6.32 The Meetings recalled that last year the governing bodies agreed to discuss the issue of 'Monitoring for Convention and Protocol purposes' under compliance issues in general, rather than under item 11 of the agenda. These issues do not relate to research and assessment (field monitoring), as they are dealt with by the Scientific Groups. However, compliance monitoring reports would need to be submitted directly to the governing bodies (LC 21/13, paragraph 8.7).
- 6.33 The Meetings noted the information provided by the delegation of Belgium in relation to the quantitative data it received, though a 'black-box type system', from permit holders who were engaged in dumping activities. This allowed for a strong check on the quality of sediments and position of the disposal activities. These data are compiled into annual reports.
- 6.34 The delegation of Canada informed the Meetings it collected data on permit application rejections, violations of permits and other permit reporting requirements.
- 6.35 The Meetings thanked Belgium and Canada for this information and invited them to provide a written report describing this monitoring activity.
- 6.36 In conclusion, the governing bodies invited Contracting Parties to both the Convention and Protocol to submit reports on <u>compliance monitoring</u> to the next session. These reports would not only be important to show that the goals of dumping policies and permit conditions were met, but would contribute to show to a wider audience that the London Convention and Protocol are effective agreements. Such reports would also offer valuable information for the LP Compliance Group.

7 TECHNICAL CO-OPERATION AND ASSISTANCE

DRAFT "IMPLEMENTATION PLAN" OF THE 'BARRIERS TO COMPLIANCE' PROJECT

7.1 The Meetings recalled that in 2007, the governing bodies reviewed several technical co-operation and assistance activities contained within the Final Report of the 'Barriers to Compliance' (B2C) Project and adopted a Strategic Approach to implement the activities. They also established a steering group to oversee and guide the further planning and implementation of the project. (LC 29/17, annex 8). The Strategic Approach would help to prioritize support for States to overcome the legislative, institutional, technical and socio-economic barriers that have been identified towards full compliance with the London Protocol.

- 37 - LC 30/16

- 7.2 The Secretariat informed the Meetings that in May 2008, the Scientific Groups reviewed progress and considered a draft Implementation Plan (IP), prepared by the Secretariat, on activities being planned under the overall B2C Project. The Groups approved the draft IP, as a living document, and forwarded it to the governing bodies for their consideration.
- 7.3 The Secretariat introduced document LC 30/7 that contained the draft Implementation Plan, as approved by the Scientific Groups and updated by the Secretariat, for a number of activities that match initial funding and in-kind pledges that have already been received. It was noted that the purpose of the Implementation Plan is that it can be used by Contracting Parties to identify activities that may be of particular interest, whether as a donor and/or offering a particular skill or as a (future) recipient. It would also form the basis for reporting to future sessions of the Scientific Groups and governing bodies, and form a benchmark for analysing the effectiveness of the overall "Barriers to Compliance" Project. It is envisaged that as additional funding becomes available this document would be revised and updated accordingly. It was noted that the Plan contained several proposed activities that were unfunded. Further funding pledges would therefore be needed to complete these activities.

7.4 The Meetings noted that:

- a further \$10,000 had been allocated under the IMO-ITCP for the proposed Regional Workshop for the Caspian and Black Sea countries, which is to be held in Azerbaijan in December 2008, bringing the total support for this Workshop to \$49,000;
- .2 the Governments of Peru and Indonesia had both indicated a strong interest in hosting TC- activities related to the B2C Project;
- .3 the Government of Iran had indicated its interest in becoming a pilot country for the Gulfs Region; and
- .4 the Government of Bangladesh was also interested in hosting some form of Workshop in the near future.
- 7.5 The Meetings also noted that several proposed activities had been added to the draft IP, but were recorded as 'not yet funded'. The Meetings further noted that the Secretariat had submitted an application to the Swedish International Development Co-operation Agency (Sida) to fund projects in Indonesia (\$137,500) and Thailand (\$112,500) as pilot countries in South East Asia for the period 2009-2011.
- 7.6 With regard to the funding pledged by the French Government through the "Fonds Francais pour l'Environnement Mondial (FFEM)" in Paris, the Secretariat informed the Meetings that as was indicated in document LC 30/7, the FFEM Steering Committee had accepted the initial application in July 2008 for €350,000 and a full application was being prepared for approval in November 2008 by a consultant under the direction of the FFEM Secretariat for this purpose. It was initially intended to target two counties in the Mediterranean Sea Region (Egypt and Algeria) and develop a substantive project for these recipients under the B2C Project.
- 7.7 The Meetings noted that due to difficulties in contacting the appropriate authorities in Algeria, finalization of this application had not been possible before the November 2008 deadline. The documentation would now be submitted to the next session of the FFEM Committee in March 2009, when a second opportunity presents itself for this funding application.

LC 30/16 - 38 -

If Algeria would not be in a position to commit itself to the project, Morocco would also offer a good opportunity as a pilot country under the B2C project.

- 7.8 The delegation of Algeria indicated its appreciation to be included in the project and stated that it would transmit this information to its capital with a view to identify the appropriate contacts for these activities.
- 7.9 The delegation of Egypt looked forward to working with the Secretariat and the FFEM consultant in developing this project. It had already had direct contacts with the delegation of France to coordinate the implementation of the activities.
- 7.10 The delegation of Peru, supported by the delegations of Chile and Bolivia, stressed the need for a, as yet unfunded, national Workshop on the London Protocol as shown under Activity 11 in document LC 30/7. The delegation of Bolivia, while being a Contracting Party to the London Convention also indicated it would appreciate receiving advice regarding accession to the London Protocol in the near future.
- 7.11 The delegation of Nigeria stated that it would be interested in hosting a national Workshop on the London Protocol to give further impetus to their efforts towards accession to the Protocol.
- 7.12 The Meetings noted with appreciation the following offers supporting the recommended activities in the IP of the B2C Project:
 - .1 the delegation of Spain announced a contribution of €30,000 for the Workshop in Peru;
 - .2 the delegation of the United States announced a contribution of **US\$100,000**;
 - .3 the delegation of the United Kingdom announced a contribution of £20,000; and
 - .4 the delegation of the Republic of Korea announced a financial contribution, the amount of which had yet to be confirmed.
- 7.13 The delegation of Canada announced that it would provide C\$25,000 to support the Regional Workshop planned for the Mediterranean Sea countries to be held in Rome in conjunction with the next session of the Scientific Groups. The details of this Workshop are further discussed in paragraphs 7.45 to 7.50 below.
- 7.14 The delegation of China announced that it was already giving effect to the IP through providing technical expertise and resources to neighbouring countries in the Asia-Pacific region with a view to promoting the ratification and compliance to the London Protocol.
- 7.15 The representative from UNEP announced that he would inform the UNEP Head Office in Nairobi about the plans for the Peru Workshop. He also suggested that the 10th annual global meeting of UNEP Regional Seas Conventions and Action Plans, to be held from 25 to 27 November 2008 in Guayaquil, Ecuador, at the kind invitation of the Secretariat of the Permanent Commission for the South Pacific (CPPS), might provide the opportunity for further informal discussions about the Peru Workshop.

- 39 - LC 30/16

- 7.16 The Meetings also noted that UNEP was prepared to contribute a further \$12,000 in 2009 to the implementation of the B2C project as an extension of the current agreement between IMO and UNEP.
- 7.17 The Meetings, having considered the comments from the floor, established the *Ad Hoc* Working Group on the B2C Implementation Plan, under the lead of Dr. Ezio Amato (Italy) and instructed it to review and finalize the draft B2C Implementation Plan, taking into account the suggestions made by the delegation of United States.

REPORT OF THE AD HOC WORKING GROUP

7.18 The Ad Hoc Working Group on the B2C Implementation Plan met on 29 October 2008 and its chairman, Dr. Ezio Amato (Italy), informed the Meetings that the Working Group had discussed the comments suggested by the United States and others. The Working Group, which was attended by the members of the B2C Steering Group (China, Italy, Republic of Korea, United States and UNEP), agreed to work intersessionally on the Implementation Plan to take account of the proposals for amendments by the United States delegation and any others which may be received from the countries with a view to preparing an updated version of the IP for consideration by the next session of the Scientific Groups. In this respect, other countries/organizations were urged to join the Steering Group, be they donors or recipient countries.

ACTION BY THE GOVERNING BODIES

- 7.19 Following the consideration of the report by the Chairman of the *Ad Hoc* Working Group, the Meetings:
 - .1 adopted the Implementation Plan as shown in annex 9 to this report as a living document, to be updated by the B2C Steering Group, under the lead of Italy;
 - .2 instructed the B2C Steering Group to forward the amended Implementation Plan to the next session of the Scientific Groups in May 2009 for their review; and
 - .3 urged other Contracting Parties to join the B2C Steering Group, be they donors or recipient countries.

DEVELOPMENT OF THE GLOBAL INVENTORY OF DUMPING ACTIVITIES IN THE PERIOD 2000-2005 ('STATE OF SEA DUMPING' REPORT - SSDR)

7.20 It was recalled that in 2007, the governing bodies noted, with appreciation, the financial support of Canada and Italy to prepare a global inventory of dumping activities in the period 2000-2005 ("State of Sea Dumping" Report – SSDR) which would underpin and inform other activities being considered and planned under the overall 'Barriers to Compliance' Project. It was envisaged that the inventory would provide a better understanding of what is being dumped where, including, especially, reports outside of the LC/LP reporting system. The data would include quantities of material dumped, types of wastes dumped, frequency of dumping activities if possible and the period over which the dumping occurred.

LC 30/16 - 40 -

- 7.21 The Meetings noted that on 1 April, 2008, the Secretariat had contracted the Centre for Environment, Fisheries & Aquaculture Science (Cefas), in the United Kingdom, to develop the global inventory.
- 7.22 The delegation of the United Kingdom informed the Meetings that a LC/LP circular had been widely distributed to London Convention and Protocol Parties, UN Members, UNEP, UN specialized agencies, IGOs and NGOs in consultative status with the London Convention and Protocol. Several responses had been received, including from IAPH indicating that they would be contacting their member organizations to contribute to the report. Use would also be made of the IMO Global Waste Survey that had been concluded in 1995. This, it was hoped, might offer good contact points for enquiries.
- 7.23 The observer from Greenpeace International announced it would circulate the request for information for the SSDR to its regional programme offices for their further action.
- 7.24 The Meetings noted that the SSDR would be completed by 31 March 2009.

ACTION BY THE GOVERNING BODIES

7.25 In conclusion, the governing bodies requested the Secretariat to submit the report of the contractor (Cefas) to the next session of the Scientific Groups for their consideration.

ACTIVITIES UNDERTAKEN TOWARDS FINALIZATION OF THE SECOND PART OF THE WASTE ASSESSMENT GUIDANCE (WAG) TUTORIAL

- 7.26 The Meetings recalled that in June 2007, the Scientific Groups had completed the **Participants' Manual** of what was now called the "Waste Assessment Guidance Tutorial" and developed a communication plan for distribution of the Participants' Manual. In May 2008, the Scientific Groups established a Working Group led by the United States to review the draft **Instructors' Manual and Electronic Slide Set**. The Working Group agreed that these materials would be revised to create an overview presentation product on the Waste Assessment Guidance that could be provided as take-away material to attendees at National and Regional Workshops. The aim was to create an Electronic Slide Set and Manual that those Workshop attendees could then use to provide follow-on briefings within their own agencies and organizations to further the basic knowledge of the London Convention and Protocol and the Waste Assessment Guidance. Arrangements had been agreed to continue work in the intersessional period in a correspondence group under the lead of the Dr. Tom Fredette (United States) with the aim of providing a final product for presentation to this session.
- 7.27 The delegation of the United States informed the Meetings that since May 2008 some progress had been made, but the correspondence group had not yet completed a revised Electronic Slide Set for presentation to this session.

ACTION BY THE GOVERNING BODIES

- 7.28 In conclusion, the governing bodies invited the correspondence group to report the outcome to the next session of the Scientific Groups. Correspondence group members were encouraged to put their responses to the United States.
- 7.29 The Meetings thanked the United States, and in particular Dr. Tom Fredette, for their continued efforts to bring these important outreach materials to completion.

- 41 - LC 30/16

STATUS REPORT ON THE DEVELOPMENT OF AN EXTENSION TO THE WAG TUTORIAL FOR LOW-TECHNOLOGY TECHNIQUES FOR ASSESSING DREDGED MATERIAL

- 7.30 The Meetings recalled that in May 2008, the Scientific Groups reviewed and approved a proposal from WODA to develop a WAG Tutorial extension for application of low-technology techniques when assessing dredged material in countries where only minimal technical capabilities are available. The WAG Tutorial extension would cover:
 - .1 guidance on the WAG approach and its application in a low technical environment;
 - .2 information on low-cost sampling, testing, information gathering and documenting consistent with this approach, to allow characterization of the dredged material and selection of suitable disposal sites;
 - .3 guidance on simple and low-cost monitoring of disposal activities, and feedback surveys to improve decision-making;
 - .4 case study examples; and
 - .5 further references and links to the Waste Assessment Guidance itself.
- 7.31 The Meetings noted that in the knowledge that this project was fully funded by generous contributions from the United States and IAPH, the Secretariat had been instructed to prepare a contract with the Central Dredging Association (CEDA), a subsidiary of WODA, as soon as possible so that the project could be started as planned.
- 7.32 The Secretariat stated that it had recently prepared a draft contract and this was currently being reviewed by the CEDA Secretariat and it envisaged that the actual work would start before the end of 2008.
- 7.33 The delegation of the United Kingdom informed the Meetings on behalf of WODA that it, and the subcontractor (Cefas), were ready to start the work as soon as the contract had been issued and the target was still to submit the draft WAG Tutorial extension for review by the Scientific Groups in May 2009.
- 7.34 In conclusion, the Meetings noted that the outcome of this project would be reported to the next session of the governing bodies in 2009 and, once the extension to the WAG Tutorial was completed, Contracting Parties would have an additional tool to reach out to administrations seeking advice on dredged material management under the London Convention and Protocol.

THE FUTURE OF THE SEA-WASTE NETWORK ON INTEGRATED WASTE MANAGEMENT IN SOUTHERN AND EASTERN AFRICA

7.35 It was recalled that the governing bodies reviewed in 2007 the future of the SEA-WASTE Network on integrated waste management in Southern and Eastern Africa which had been in operation since July 2002. Based on the instructions from the governing bodies, the Secretariat assisted the International Ocean Institute Southern Africa (IOI-SA) and its newly-appointed Director with the development of a strategy based on retaining the Network independently, with a renewed website offering better interactivity and some corporate advertising.

LC 30/16 - 42 -

- 7.36 The Meetings noted that the overall objective of this proposal was to identify new partners and support that is sustainable in the long term, such that SEA-WASTE II could continue the momentum developed in the first phase. The budget for execution of this strategy was based on the final installment of US\$9,400 still available under the contract between IMO and IOI-SA as the coordinator of the SEA-WASTE Network. The Meetings also noted that in May 2008, the Scientific Groups approved the proposal by IOI-SA.
- 7.37 The Secretariat had informed IOI-SA of this approval. IOI-SA would start executing the strategy and report back to the Secretariat on progress made. Having received an oral progress report only in the week before these meetings, the Secretariat proposed that the report on the outcome of this Project should be submitted to the next session of the Scientific Groups in 2009, and this was agreed.
- 7.38 The delegation of South Africa stated that it would soon meet with IOI-SA to discuss the future work programme.
- 7.39 The delegation of the Netherlands stated that it would be looking for partners to this proposal and for additional donors for the 'Barriers to Compliance' Project.
- 7.40 In conclusion, the governing bodies instructed the Secretariat to present a progress report for submission to the next session of the Scientific Groups in 2009 for their consideration.

PROGRESS WITH BILATERAL TECHNICAL CO-OPERATION PROJECTS BETWEEN COUNTRIES, AS REPORTED BY CONTRACTING PARTIES

- 7.41 The Chairman recalled that this item is meant to encourage countries reporting on bilateral projects they had established for capacity building in the field of protection of the marine environment and promotion of sound waste management.
- 7.42 As no reports had been presented, the Chairman encouraged Contracting Parties and observer countries to report on noteworthy bilateral co-operation projects to future meetings.

REPORTS ON AND PLANS TO CONVENE NATIONAL OR REGIONAL WORKSHOPS IN PREPARATION FOR THE LONDON PROTOCOL

- 7.43 It was recalled that in 2005, the 27th Consultative Meeting discussed practical guidance for organizing TC workshops under the London Convention and Protocol, and the option of convening national workshops was found attractive in light of the positive experience with two successful workshops held in Brazil (held in 2005).
- 7.44 In this regard the Secretariat informed the Meetings that two successful Workshops had been held thus far in 2008, one national Workshop in Ecuador and another Workshop for countries in the West Africa Region, held in Ghana. These Workshops were reported under agenda item 12 Outreach to new prospective Parties to the Protocol. The Meetings noted that a Regional LP Workshop would be held in Baku, Azerbaijan, in December 2008 for countries surrounding the Black and Caspian Seas at the invitation of the Government of Azerbaijan (see also paragraph 7.4 above).

- 43 - LC 30/16

- 7.45 The Meetings also recalled that in 2007, the Italian Government had announced that it would be willing to host the next session of the Scientific Groups in Rome, Italy, possibly together with a Regional Workshop (2-3 days) on the London Protocol for countries surrounding the Mediterranean Sea.
- 7.46 The delegation of Italy informed the Meetings that the dates for the next session of the Scientific Groups would be 25 to 29 May 2009 to be held in the offices of FAO, in Rome. The Regional Workshop was tentatively planned to take place from 20 to 22 May 2009.
- 7.47 The Secretariat informed the Meetings that it had developed a draft programme, in co-operation with the Government of Italy, for the Regional Workshop and had prepared a preliminary budget. The Regional Workshop would be similar to the Workshops held in the ROPME and CPPS regions where the focus was more on the LC/LP rather than on general management of wastes and protection of the marine environment (as was the case at the Regional Workshop held in Dalian, China, in 2006).
- 7.48 Taking into account the funding pledge of C\$25,000 by the Government of Canada to support this Regional Workshop, the Meetings noted that an additional amount \$19,000 would be required to meet the projected shortfall. The Meetings also noted that the draft programme would be further developed by the delegation of Italy, in co-operation with the UNEP/MAP and LC/LP Secretariats, and circulated to potential participating countries for their input before finalization of the programme.
- 7.49 The Secretariat indicated that it would seek to meet the funding shortfall from within the LC/LP Technical Co-operation Budget.
- 7.50 In conclusion, the governing bodies thanked the Government Italy for its efforts so far in organizing the IMO/UNEP Regional Workshop on the Promotion of the London and Barcelona Dumping Protocols in Rome in conjunction with the next session of the Scientific Groups.

8 DEVELOPMENT OF GUIDELINES FOR PLACEMENT OF ARTIFICIAL REEFS

- 8.1 It was recalled that in 2005, the Consultative Meeting, having noted that placement activities were conducted in practice in many parts of the world and that several delegations indicated that they would benefit from a global perspective on existing regional guidelines agreed to keep the issue of "placement" on its agenda and focus on the development of guidance for placement of artificial reefs. In 2006, the governing bodies endorsed a work plan prepared by the Scientific Groups to develop such guidance under the lead of Spain. In 2007, the governing bodies reviewed the status of development of the guidance and endorsed the Scientific Groups' approach and modified the schedule to complete the guidance for approval at this session.
- 8.2 The delegation of Spain, as Chair of the Scientific Groups' Correspondence Group on Artificial Reefs (CGAR) introduced the final Draft LC/LP UNEP Guidelines for the Placement of Artificial Reefs, as shown in document LC 30/8. The Meetings noted that the text had been finalized by the technical consultant, Dr. Lynn Jackson, on the basis of a previous draft text prepared by Spanish consultants and consultants from Southampton University. Comments and suggestions were provided by the Scientific Groups in May 2008 and reviewed by the CGAR, the Secretariat and UNEP. The UNEP Publishing Board had subsequently approved this text.

LC 30/16 - 44 -

- 8.3 The Meetings also noted document LC 30/8/Corr.1 which corrected the references to Taiwan, China, and Hong Kong, China, in the main text of the Guidelines.
- 8.4 The delegation of the United States, in introducing its document (LC 30/8/1) on 'Response to Draft Guidelines for Placement of Artificial Reefs', suggested several edits to Section 2 of the final draft Guidelines that would ensure the accuracy of the reference to the London Convention and Protocol in the Guidelines from a legal perspective. Further proposed edits were related to other international and regional instruments.
- 8.5 In the ensuing discussion, the Meetings agreed to amend the text in relation to the London Convention and Protocol and placed the references to the other relevant instruments under a new, separate heading.

8.6 In conclusion, the governing bodies:

- .1 adopted the LC/LP-UNEP Guidelines for the Placement of Artificial Reefs, as amended; and
- .2 instructed the Secretariat to publish the Guidelines in the UN working languages as soon as possible in 2009.
- 8.7 The Meetings thanked, in particular Mr. José Buceta (Spain), who had patiently and competently guided the Correspondence Group through an exhaustive development process, and all delegations that had contributed to the work now completed.
- 8.8 The Meetings also thanked UNEP, who had instigated the development of the Guidelines and had provided substantial financial and in-kind support. The Meetings commended the three other sponsors without whom this activity would not have been possible: the Governments of Spain, the United Kingdom, and the United States.
- 8.9 The delegation of Japan reiterated its view that placement activities did not fall within the mandate of the London Convention and the Protocol. It however strongly supported the purpose of the Guidelines and viewed that they were not legally binding, as agreed in 2007 by the governing bodies. The delegation stressed that the placement of artificial reefs should not be an excuse for dumping waste or other materials that would be contrary to the aims of the London Convention and Protocol. It stated that the Guidelines could be beneficial as a reference point, particularly for developing countries that did not have any form of regulation. The delegation fully supported the intention to issue the Guidelines as a joint LC/LP-UNEP publication.
- 8.10 The delegation also reiterated its view that descriptions and conditions of permits and the permit process and methodologies, should be developed in accordance with the needs and situations of particular countries. In other words, it viewed the permit process described in the Guidelines as one of a number of possible permit processes or methods available. Japan understood that this was the consensus view of the Correspondence Group which was endorsed by the Scientific Groups.
- 8.11 Japan had developed in this regard a number of regulations and standards relating to artificial reefs and hoped that the Guidelines could serve countries world-wide. Japan also expressed its appreciation to all members of the CGAR, in particular the lead country, Spain, for its hard work on this issue.

- 45 - LC 30/16

9 INTERPRETATION OF THE LONDON CONVENTION AND PROTOCOL

GUIDANCE ON MANAGEMENT OF SPOILT CARGOES (LC 30/9/1)

- 9.1 It was recalled that in 2006, the governing bodies reviewed a report on the outcome of the Joint London Convention/MEPC Correspondence Group, led by Canada, to clarify boundary issues between the London Convention and Protocol and MARPOL Annex V (Garbage). While no major overlaps were found, some clarification was provided regarding the applicability of the London Convention and Protocol to spoilt cargoes.
- 9.2 It was also recalled that based on the discussion of the recommendations in the report, the proposed way forward, and the recommendations of MEPC 55 on the same report, the Meetings had: (1) agreed that the approach to manage spoilt cargo would, in most cases, fall under the London Convention and Protocol; (2) established the "Working Group on Boundary Issues" under the auspices of the Scientific Groups, to be led by Canada, and aimed at developing practical guidance for mariners to manage spoilt cargoes; (3) adopted its terms of reference; and (4) requested it to concentrate only on technical aspects of these issues and report on policy implications, if any, for review by both the governing bodies and the MEPC.
- 9.3 In 2007, the governing bodies noted that the "Working Group on Boundary Issues" had developed draft guidance for managing spoilt cargoes and that a final draft text was submitted for review by the Scientific Groups in May 2008 and, subsequently, for review and adoption at this session and by the MEPC.
- 9.4 The delegation of Canada introduced document LC 30/9/1 containing the final draft of the "Guidance on managing spoilt cargoes", which had been prepared by the Joint LC/MEPC Correspondence Group.
- 9.5 The delegation of the United States suggested a few editorial changes to the Guidance in paragraphs 3; 4; 5; 11 and 20.
- 9.6 In conclusion, the governing bodies agreed to:
 - .1 adopt the "Guidance on managing spoilt cargoes", as amended, and as shown in annex 10 to this report; and
 - .2 forward the Guidance to MEPC 59 for its consideration and adoption and recommending its distribution through a joint LC-LP/MEPC Circular to replace Circular 2074, issued in 1998 on the same topic.
- 9.7 The Chairman thanked Canada (Mr. Paul Topping and Mr. David Taillefer) for their leadership in developing this Guidance, as well as all other delegations that had contributed to this effort.
- 9.8 The Secretariat informed the Meetings that in 1998 the original Guidance was circulated as a joint MEPC/LC Circular to all Member Governments (Administrations) and little, if any, information or reports about spoilt cargoes being dumped in accordance with the Convention or Protocol were received. Most mariners were not aware of the requirements and options available. To ensure that this would not occur again, a strategy to ensure a greater uptake of this Guidance might be needed. For instance, an education package (or brochure) could be developed for mariners or Administrations regarding the proper handling of spoilt cargoes.

LC 30/16 - 46 -

- 9.9 With regard to the review of MARPOL Annex V being conducted by MEPC, it was also recalled that an MEPC Correspondence Group, led by Canada, had been preparing proposals to review MARPOL Annex V concerning the discharge of garbage from ships and that its recommendations would be discussed at MEPC 59 in July 2009.
- 9.10 In terms of planning and timing of the LC/LP outreach effort on spoilt cargo management and due to the relationship between "Garbage" and "spoilt cargoes", it was suggested to coordinate and possibly combine the outreach activities of both issues as soon as MEPC has adopted the Guidance on managing spoilt cargoes.
- 9.11 The Meetings therefore established an *Ad Hoc* Working Group, under the lead of Canada, with the aim to:
 - .1 prepare an outreach strategy to ensure a greater uptake of the Guidance on managing spoilt cargoes;
 - .2 prepare a strategy on cooperation between LC-LP and MEPC for future work of mutual interest; and
 - .3 provide a brief written report on Friday, 31 October 2008.

REPORT OF THE AD HOC WORKING GROUP (LC 30/WP.7)

9.12 The *Ad Hoc* Working Group on the development of a draft outreach strategy for spoilt cargo management met on 30 October 2008 under the chairmanship of Ms Linda Porebski (Canada) with delegations from Belgium, Canada, Italy, Nigeria and the United States in attendance.

Outreach strategy

- 9.13 The Working Group suggested the following action points for an outreach strategy:
 - once the Guidance on managing spoilt cargoes has been approved by MEPC, it would need to be made available on the website;
 - a new IMO training course module should be created on Guidance on managing spoilt cargoes to be used in Technical Co-operation activities carried out under MEPC and LC/LP; and
 - a text should be developed with the key elements of the Guidance on managing spoilt cargoes for posting on the IMO website.
- 9.14 The Working Group recognized the need:
 - .1 for further discussion on the actual process that could be used to produce the above-mentioned module (i.e., selection of possible LC/LP and MEPC experts); and
 - .2 to investigate other established mechanisms to communicate with mariners and engage with MEPC to explore the best options to fulfil this task. A small information brochure could be created for this purpose.

- 47 - LC 30/16

Strategy on future cooperation between LC/LP and MEPC

- 9.15 The Working Group recommended that the Joint LC-LP/MEPC Working Group on Boundary Issues should continue to work in the intersessional period as a correspondence group. That group could specifically send the developed spoilt cargo guidance to the MEPC Correspondence Group which is reviewing MARPOL Annex V, for its consideration. The MEPC Correspondence Group should then consider whether the main conclusion of the Guidance on management of spoilt cargoes should be noted in any updates to Annex V or its guidance. This could also improve the uptake of the Guidance on management of spoilt cargoes.
- 9.16 The LC/LP members should also participate in the review of MARPOL Annex V. It was suggested that LP/LC experts should therefore join the MEPC Correspondence Group and exchange views on other boundary issues that are being explored during the review of MARPOL Annex V. During this correspondence, the experts from both groups could then develop the recommended training and communication products mentioned above.
- 9.17 The Working Group also noted that the draft Guidance on Best Management Practices for Removal of Anti-Fouling Coatings from Ships had now been completed (see paragraphs 9.21 to 9.27 below) and would also be submitted to the next session of MEPC, as agreed by the Meetings, and as the IMO Sub-Committee on Bulk Liquids and Gases (BLG) is working on a similar document this should be directed to their attention.

Outcome and Recommendations

- 9.18 The Working Group agreed to the main elements of the strategies mentioned above and recommended that:
 - .1 the Secretariat requests that the Guidance on managing spoilt cargoes also be made available on the IMO website, once approved by MEPC;
 - a joint intersessional correspondence group be tasked with starting the development of a new IMO training course module on Guidance on managing spoilt cargoes as well as a plain language brochure with the key elements of the guidance. This could also be used in Technical Co-operation activities as well as be distributed to mariners or through the internet;
 - .3 the Secretariat requests that MEPC investigates other established mechanisms to communicate with mariners and further distributes the Guidance and/or the brochure as appropriate; and
 - .4 LC/LP experts join the Correspondence Group on the review of MARPOL Annex V and exchange views on other boundary issues that are being explored during the review.

ACTION BY THE GOVERNING BODIES

- 9.19 After discussion of the report of the *Ad Hoc* Working Group, the governing bodies:
 - .1 endorsed the above recommendations; and

LC 30/16 - 48 -

- .2 agreed that the Joint LC-LP/MEPC Working Group on Boundary Issues should continue to work in the intersessional period as a correspondence group to act on the above recommendations.
- 9.20 The Meetings thanked Ms Porebski and all who had contributed to the development of the abovementioned strategies and course of action.

GUIDANCE ON BEST MANAGEMENT PRACTICES FOR REMOVAL OF TBT PAINTS FROM SHIPS

- 9.21 It was recalled that last year, the governing bodies noted that the development of advice to MEPC and the maritime industry on the management of waste streams resulting from the removal of anti-fouling systems from ships, had become a matter of urgency as the Anti-Fouling Systems Convention (AFS) would enter into force on 17 September 2008. The governing bodies agreed that the work had to be finalized, as soon as possible, and that a further advanced text of the guidance be submitted to this session for adoption with the aim of submitting it to MEPC for their consideration and adoption.
- 9.22 It was further recalled that in May 2008, the Scientific Groups continued their work and:
 - approved the Draft Guidance on Best Management Practices of Removal of TBT Paints from Ships as shown in annex 11 to their report, as 'work in progress'; and
 - .2 established an Intersessional Correspondence Group, under the lead of Mr. Frank Thomsen (United Kingdom), to finalize the draft Guidance for submission to this session, with a view to forwarding the document to MEPC for appropriate action.
- 9.23 The Meetings were advised that earlier this month MEPC 58 noted and appreciated the updated version of the Draft Guidance and invited the governing bodies to provide the final version of the guidance document to MEPC 59 (July 2009), taking into consideration the environmental risk posed by in-water hull cleaning (MEPC 58/23, paragraph 13.4).
- 9.24 The delegation of the United Kingdom introduced document LC 30/9 on Draft Guidance on Best Management Practices for Removal of Anti-Fouling Coatings from Ships, including TBT hull paints. The Meetings noted that this document contained a further developed Draft Guidance, compared with the text available in May 2008.
- 9.25 The Meetings also noted that MEPC had suggested that in-water hull cleaning should be strongly discouraged because of the environmental risks posed by introduced species, and agreed that the Guidance be amended accordingly (annex to the document LC 30/9, paragraph 4.2).
- 9.26 In conclusion, the governing bodies agreed to:
 - .1 adopt the "Guidance on Best Management Practices for Removal of Anti-Fouling Coatings from Ships, including TBT hull paints", as amended, and as shown in annex 11 to this report; and
 - .2 forward the Guidance to MEPC 59 for its consideration and adoption and recommending its distribution through a joint LC-LP/MEPC circular.

- 49 - LC 30/16

9.27 The Chairman thanked the United Kingdom (Mr. Frank Thomsen) for the excellent work done on this urgent issue and all the delegations that provided useful input in this effort.

RIVERINE AND SUB-SEA DISPOSAL OF TAILINGS AND ASSOCIATED WASTES FROM MINING OPERATIONS

- 9.28 The Meetings noted that in May 2008, the Scientific Groups considered information provided by the observer from Greenpeace International that described the nature of sub-sea (submarine) and riverine tailings disposal operations from a number of mines located around the world. The Scientific Groups noted that while pipeline discharges and other land-based sources of marine pollution fell beyond the regulatory scope of the London Convention and Protocol, the discharge of such tailings may frequently fall beyond the scope of any effective international regulatory control, despite their clear potential to act as major contributors to coastal marine environments of contaminants of concern to the Convention and Protocol. The Scientific Groups had suggested that the Secretariat should write to the UNEP-GPA Office suggesting possible topics of co-operation on this issue.
- 9.29 The Meetings also noted that the general obligation under the Convention and Protocol is to, *inter alia*, protect and preserve the marine environment from **all** sources of pollution and that there is a need for detailed assessment and effective control of sub-sea tailings discharges.
- 9.30 In discussion, the observer of Greenpeace International highlighted once more that mining tailings discharges are currently not regulated under any international treaty and urged the Secretariat and UNEP-GPA to start working on this actively.
- 9.31 This approach was generally supported.
- 9.32 The delegation of the United Kingdom indicated that an EU sponsored International Conference on Deep Sea Mine Tailings would be held during the first week of November 2008, in Papua New Guinea. On this occasion, there could be discussion on all the aspects of recent work that was commissioned by the Department of National Planning and Monitoring, Papua New Guinea (PNG), into the disposal of mine tailings in the deep sea. The main aim of the conference is to get international scientists and key stakeholders such as PNG Government Agencies, NGO's, mining industry, and landowner representatives together to disseminate and discuss the results. The delegation also indicated that more information on the above-mentioned Conference and Draft guidelines on management of mine tailings discharges could be found at http://www.sams.ac.uk/sams-news/events-sams/pag-conference.
- 9.33 In conclusion, the governing bodies agreed that the Secretariat should write to the UNEP-GPA Office suggesting possible topics of co-operation with a view to the detailed assessment and effective control of sub-sea discharges of mine tailings, amongst other topics of common interest.

LC 30/16 - 50 -

VESSEL GENERATED SEWAGE SLUDGE

- 9.34 The Meetings recalled Action point .48 of document LC 30/3 relating to the Scientific Groups' discussion on vessel generated sewage sludge and their conclusion that this issue fell within the remit of MARPOL Annex IV (Sewage).
- 9.35 The governing bodies agreed to endorse this conclusion. As a consequence no further action was required on this issue.

10 MATTERS RELATED TO THE MANAGEMENT OF RADIOACTIVE WASTES

- In introducing this issue, the Secretary mentioned that, in 2003, the 25th Consultative 10.1 Meeting adopted IAEA Guidance on how to conduct specific assessments under Step 6 of the "Guidelines for the Application of the *De Minimis* Concept under the London Convention 1972" which itself had been adopted in 1999. As the IAEA Guidance addressed only effects on human health, the governing bodies, therefore, urged the IAEA to continue its work on the development of a mechanism for environmental protection from the effects of ionizing radiation so that the protection of the environment could be adequately addressed in a specific assessment, under Step 6 of the 1999 Guidelines. The Secretary also recalled that it was agreed that in the meantime Contracting Parties should use a precautionary approach and ensure that an assessment, of potential effects on marine flora and fauna and legitimate uses of the sea, would be included in specific assessments using contemporary scientific information. Since 2003, the IAEA had annually informed the Meetings on the progress achieved as reflected in their reports. The Secretary also recalled that, in 2006, the governing bodies agreed to update the following two inventories regarding radionuclides at sea, as co-ordinated by IAEA (Inventory of Radioactive Waste Disposals at Sea (IAEA-TECDOC-1105) lastly presented in 1999 to the 21st Consultative Meeting; and the *Inventory of Accidents and Losses at Sea Involving* Radioactive Material, (IAEA-TECDOC-1242) lastly presented in 2001 to the 23rd Consultative Meeting).
- 10.2 The IAEA representative reported progress on matters of interest to the London Convention and Protocol, covering activities in the two major areas referred to in the Secretariat's introduction.
- 10.3 The first section of the IAEA progress report outlined work being undertaken by the IAEA, ICRP (the International Commission on Radiological Protection), the European Commission, and international agencies regarding the development of mechanisms for the radiological protection of humans and the environment. The report noted that, in 2007, the ICRP approved the revised fundamental recommendations on the protection of man and the environment which can be found in ICRP Publication 103: Recommendations of the ICRP, Annals of the ICRP Volume 37/2-3. This ICRP publication includes a chapter entitled "Protection of the Environment".
- 10.4 The proposed recommendations constitute a preliminary approach to fill a conceptual gap in the system of radiological protection and a framework for acquiring knowledge and information that could be used in the future to define a system of protection of the environment, complementary with the existing systems to radiation protection of humans. However, this document, considered as authoritative by the IAEA, did not include numerical radiological criteria like "limits" to non-human biota. IAEA also indicated that, within the process of revision of the IAEA Basic Safety Standards, a proposal is being discussed for 'planned exposure situations' and 'existing exposure situations' as defined by ICRP. Taking into account all the

- 51 - LC 30/16

work being done at the international level, particularly the ICRP proposal and good practices in Member States, and subject to the approval of the revised Basic Safety Standards, the IAEA is considering the development of practical guidance on the assessment of the radiological impact on non-human species for planned exposure situations.

- 10.5 The IAEA representative highlighted that there had been significant progress towards the revision of the Basic Standards for Protection Against Ionizing Radiation and the Safety of Sources, IAEA SS-115 1996, in short BSS, where explicit international requirements on environmental radiation protection were considered. The revised BSS are being developed together with several cosponsoring/collaborating organizations following the established mechanisms of developing IAEA standards, the participation of relevant advisory standards committees and consultation with all of its Member States. However, no new developments in, or major revisions of, detailed safety standards applicable to the control of releases of radioactive materials to the environment were foreseen before 2009/2010.
- The second part of the IAEA report dealt with updating of inventories that the IAEA, upon the request of the Contracting Parties, had developed and maintained of radioactive materials entering the marine environment from all sources, including: (a) radioactive waste disposal at sea; and (b) accidents and losses at sea involving radioactive material. A Note Verbale was sent to all of the IAEA's Member States (IAEA Ref: 754-J9.14.Circ, dated 17 April 2007) and a circular letter to the IMO's National focal points for the London Convention and Protocol (IMO Ref: T5/5.01-LC-LP.1/Circ.16 dated 20 July 2007). IAEA presented the list of the countries which have formally answered the circular letters, none of which of them reported any new information). The rest of the countries have still not sent a formal response. During the last year, both France and the United States notified the IAEA and the Secretariat, respectively, of corrections to their specific sections involving historical radioactive waste disposal sites in the Pacific. This information was inadvertently omitted in earlier reports to the IAEA. The French sites, off the coast of Mururoa and Hao Atolls in French Polynesia, which were used from 1967 to 1982, have been verified by the IAEA for inclusion in the next update of the inventory. The United States site, approximately 90 kilometres off the coast of Hawaii, which was used between 1963 and 1968, has yet to be verified by the IAEA.
- 10.7 The representative from Greenpeace International inquired whether the IAEA will consider the results from the EC project PROTEC regarding definition of numerical benchmarks for protecting biota against radiation in the environment. The IAEA representative responded that the IAEA has been following the work and results from the PROTEC project and is considering incorporating in future practical guidance on any valid result applicable at the international level, particularly the screening values proposed to verify the degree of protection in an objective manner when applied together with state-of-the-art models and parameters.
- 10.8 The United Kingdom noted that they had provided a report to the 30th session of the Scientific Group regarding the *de minimus* levels of radioactivity in dredged material from ports in England and Wales (LC/SG 30/INF.2).
- 10.9 The governing bodies noted the information provided by the IAEA, and requested the Agency to continue to regularly inform them of progress on the issues related to the protection of the environment from ionizing radiation and the inventories of radioactive material from waste disposal at sea and accidents and losses at sea. The Chairman noted the agreement of the 25th Consultative Meeting that, in the meantime, Contracting Parties should use a precautionary approach and ensure that an assessment, of potential effects on

LC 30/16 - 52 -

marine flora and fauna and legitimate uses of the sea, would be included in specific assessments using contemporary scientific information.

11 MONITORING FOR THE PURPOSES OF THE LONDON CONVENTION AND PROTOCOL

- 11.1 It was recalled that, in 2007, the governing bodies endorsed the conclusions which the Scientific Groups had reached in June 2007, in particular, that the Bureau should present a further developed plan for a substantial contribution to the "UN Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socio-economic Aspects", in short the UN Regular Process, from the London Convention and Protocol perspective, building on the suggestions made by the Scientific Groups on this issue in recent years; and submit this plan for consideration by the Scientific Groups in May 2008 and execution soon after.
- 11.2 It was also recalled that, in May 2008, the Scientific Groups noted that funding had been secured through a generous contribution by the Government of the Republic of Korea and instructed the Secretariat to: (1) prepare an outline of approximately 4 to 5 pages for the LC/LP contribution to the UN Regular Process; (2) commission a consultancy, as soon as possible, for the preparation of the full LC/LP contribution; and (3) inform UNESCO–IOC and UNEP, as the co-ordinators of the UN Regular Process, of this plan.
- 11.3 The Secretariat informed the Meetings of the limited action it had taken since May 2008. The Meetings noted that, in the coming weeks, a consultant would be selected to start working in early January 2009.
- 11.4 The Meetings were advised that the report on the 'Assessment of Assessments phase', under the UN Regular Process, was currently being prepared for presentation to the UN General Assembly, whereas the LC/LP contribution would only become available in the course of 2009, after review by the Scientific Groups in May 2009.
- 11.5 The delegation of the United States suggested that the "State of Sea Dumping" Report could be used as a useful component of the LC/LP contribution.
- 11.6 The Meetings thanked the Republic of Korea for providing funding and strongly supported the LC/LP contribution to the UN Regular Process.

12 OUTREACH TO PROSPECTIVE NEW CONTRACTING PARTIES TO THE PROTOCOL AND RELATIONS WITH OTHER ORGANIZATIONS IN THE FIELD OF MARINE ENVIRONMENTAL PROTECTION

- 12.1 It was recalled that recent Meetings considered several reports on outreach activities in the form of focused National or Regional Workshops that were held to promote the London Protocol, mostly co-organized by Contracting Parties and the Secretariat. The governing bodies were invited to continue the consideration of outreach activities, as reported by Contracting Parties, international organizations, Chairmen and Vice-Chairmen and the Secretariat in their role as "ambassadors" to promote the London Protocol, and explain what it is and why it is important.
- 12.2 The Secretariat informed the Meetings of the outcomes of the two IMO Workshops held in 2008 under the London Convention and Protocol Technical Co-operation and Assistance

- 53 - LC 30/16

Programme, with the primary objective to raise awareness with regard to all aspects of the London Protocol, including the legal, economic, technical and administrative requirements and implications of ratification/accession.

- 12.3 The Meetings noted that the Ecuador National Workshop, organized in conjunction with the Directorate-General of Merchant Marine (DIGMER), had been held on 24 and 26 May 2008 at the offices of DIGMER in Guayaquil and had been attended by 28 participants from the host country and one participant from Peru.
- 12.4 The Meetings also noted that the IMO/GMA Workshop on the London Convention and its Protocol for Anglophone countries in West Africa had been held from 2 to 4 July 2008 in Accra, Ghana, and had been hosted by the Ghana Maritime Authority (GMA). Twenty delegates from the Gambia, Ghana, Guinea Bissau, Nigeria, Liberia and Sierra Leone had attended the Workshop.
- 12.5 The delegation of Ecuador expressed its gratitude to all involved in the organization of the workshop in Guayaquil and informed the Meetings of Ecuador's intention to become Party to the Protocol in the near future.
- 12.6 The delegation of Nigeria reiterated its intention to ratify the Protocol and indicated Nigeria's willingness to host a national workshop targeted specifically to policy makers. The delegation urged the Secretariat to explore the possibility of organizing such a workshop at the earliest possible opportunity.
- 12.7 The delegations of Italy, Saudi Arabia and Spain informed the Meetings about their efforts to promote the London Protocol in a number of meetings held under the auspices of the Barcelona Convention, in the framework of the ROPME and PERSGA agreements and the OSPAR Convention, respectively. In addition, the delegation of Spain informed the Meetings about its intention to report to the forthcoming meeting of the Working Group on Human Activities, to be organized under the auspices of the OSPAR Commission, on the outcome of current meetings of the London Convention and Protocol.
- 12.8 The representative from UNEP suggested that the 10th Global Meeting of the Regional Seas Programmes and Action Plans for the protection of the marine environment could be another effective vehicle for promoting the LC/LP and offered to facilitate a dialog in this respect (see also paragraph 7.15 above).
- 12.9 The Meetings noted that "outreach" was an important element of the Long-term Strategy for Technical Co-operation, and of the contacts maintained with other organizations in the field of marine environmental protection, and invited delegations to continue to play an ambassadorial role for the London Protocol and report back on the results to the next Meetings in 2009.

CONTINUATION IN GROWTH OF THE MEMBERSHIP TO THE LONDON CONVENTION

- 12.10 The Meetings noted that the membership to the London Convention is still growing and recalling the concerns expressed by the Secretariat in this regard (see paragraphs 2.10 and 2.11 above), endorsed the proposals by the Secretariat to:
 - .1 develop a "light" contact bulletin to keep in contact with country representatives after each National/Regional Workshop, so as to monitor what is happening in the concerned countries; and/or

LC 30/16 - 54 -

- .2 prepare a circular letter to IMO/UN member States who would be planning towards joining the London Convention or Protocol, and then strongly advise them to aim for the London Protocol.
- 12.11 In conclusion, the Meetings agreed that the circular letter to IMO/UN Member States should clearly emphasize that the Protocol would supersede the Convention in the future and the pre-eminence of the Protocol rather than forcefully advising against joining the Convention and instructed the Secretariat to develop such a letter in consultation with the Bureau.

REVIEW OF A LIST OF CURRENT AND PROPOSED LONDON CONVENTION AND PROTOCOL PUBLICATIONS

- 12.12 The Meetings noted that the Secretariat had endeavoured to increase the number of published documents produced under the London Convention and Protocol, to enhance the awareness of these agreements and to assist in administrative and technical matters.
- 12.13 Having noted that the Secretariat prepared a short-list of recent and proposed publications and an outline for an LC/LP publication on CO₂ sequestration in sub-seabed geological formations, the governing bodies endorsed this list and the outline for the new publication, as set out in annex 12 to this report, and instructed the Secretariat to complete the publications as planned.

REVIEW OF THE LONDON CONVENTION WEBSITE

- 12.14 The Secretariat recalled that the governing bodies, at their last session, on the basis of concerns expressed by the Scientific Groups about some aspects of the improved London Convention website, agreed that all documents on the London Convention website should be freely accessible by all users, without the use of passwords, and located at a higher, clearly visible level to allow quicker access and with improved downloading speeds.
- 12.15 The Secretariat informed the Meetings that, as instructed, it had carried out a number of improvements including improving access to documents. The website now contained all recent meeting documents and reports, accessible without the use of passwords and regular improvements would continue to be made. In addition, new documents were being e-mailed to all previous attendees of meetings and to all known London Convention and Protocol National Focal Points.
- 12.16 With regard to improving the download speeds and downloading of multiple documents, the Meetings noted that this was not possible due to the fact that the IMO website is configured as an information sharing site rather than a document distribution server. Recognizing that the functionality of downloading of multiple documents is embedded in a purpose built site IMODOCS, which also contains all the London Convention and Protocol meeting documents, the Secretariat suggested that Contracting Parties and observers, who wish to use the multi-lingual IMODOCS website, should obtain passwords to this site from the IMO National Focal Points in their respective countries or from their parent organizations in consultative status with IMO.

- 55 - LC 30/16

- 12.17 The delegations of Italy, Netherlands, and the United Kingdom expressed their satisfaction with regard to the review of the website and indicated some areas were further improvement may be considered by the Secretariat.
- 12.18 In conclusion, the governing bodies instructed the Secretariat to continue to improve the website and provide the next Meetings with an update on this matter.

REVIEW OF PROGRESS WITH COLLABORATIVE ARRANGEMENTS

- 12.19 The Meetings recalled that there were currently collaborative agreements with the International Oceans Institute (IOI), for which the governing bodies approved a revised Memorandum of Agreement in 2006, as well as since 2006, a partnership with UNEP-GPA and the UNEP Regional Seas Programme. It was also recalled that the Secretariat had been instructed to work towards collaborative agreements with FAO and IOC.
- 12.20 The Secretariat informed the Meetings that the LC/LP partnership with UNEP-GPA and the UNEP Regional Seas Programme had been productive and mentioned the following activities:
 - .1 UNEP contributed in a substantial way to the launch of the 'Barriers to Compliance' Project;
 - .2 UNEP is prepared to contribute a further \$12,000 in 2009 to the implementation of this project;
 - .3 the substantial contribution from the French Government to the 'Barriers to Compliance' Project with a focus on the Mediterranean Sea countries will be implemented in co-ordination with the UNEP/MAP Secretariat in Athens, Greece, and the Rome Workshop in 2009 will be an IMO/UNEP Workshop;
 - .4 the development of guidance on placement of artificial reefs was an initiative of UNEP and would lead to a joint IMO/UNEP publication in 2009; and
 - .5 the cooperation with the UNEP/CBD secretariat on ocean fertilization issues.
- 12.21 The Secretariat informed the Meetings that under the revised agreement with IOI contributions of US\$20,000 had been made both in 2007 and 2008 from the IMO-ITCP to support experts from countries in Eastern Europe to take part in the IOI training programme on Ocean Governance in Malta. For 2008, four experts, one from Egypt, Turkey, Russian Federation and Ukraine, respectively, were sponsored. For its part, IOI had agreed to continue to make available its network of regional and national offices for distribution of the Waste Assessment Guidance Tutorial and any other relevant materials regarding the LC/LP.
- 12.22 The Meetings noted that the Secretariat was continuing to explore areas of co-operation between the London Convention and Protocol and both FAO and IOC, and agreed that co-operation with other organizations in the field of marine environmental protection should be continued, and expanded, as appropriate. The suggestion was made that the Secretariat should discuss potential areas for co-operation with FAO in May 2009 when the Scientific Groups were hosted in Rome.

LC 30/16 - 56 -

PROGRESS REPORTS ON GESAMP, AND OTHER RELATED ISSUES IN THE FIELD OF MARINE ENVIRONMENT PROTECTION FROM CONTRACTING PARTIES, UNEP AND THE SECRETARIAT

- 12.23 The Secretariat informed the Meetings that, GESAMP⁷ had held its 35th regular session in Accra, Ghana, from 12 to 16 May 2008 and had reviewed its current programme of activities. The full report of GESAMP 35 had been circulated to the London Convention and Protocol focal points in the national administrations.
- 12.24 The Meetings noted that since 2006, GESAMP had established a solid co-operation with the Swedish Government, and for its long-term success and viability GESAMP would benefit from identifying more such partnerships and opportunities of co-operation.
- 12.25 The Meetings expressed their appreciation for the substantial support provided by the Swedish government and instructed the Secretariat to keep the governing bodies informed of the activities of GESAMP. Further information about GESAMP's activities can be obtained by visiting http://www.gesamp.org.

REPORTS FROM REPRESENTATIVES OF INTERNATIONAL ORGANIZATIONS ON THEIR ACTIVITIES IN THE FIELD OF MARINE ENVIRONMENT PROTECTION

12.26 Having acknowledged IETA's provisional status as an observer, the representative of IETA thanked the Meetings for the opportunity to attend and informed about his organization's commitment to contribute to the discussion on the potential environmental impacts, and near-term operational plans regarding ocean iron fertilization. In this respect he welcomed the work done on CO₂ sequestration and ocean fertilization and suggested that further scientific research was needed in these fields.

13 ADMINISTRATIVE ARRANGEMENTS AND FUTURE WORK

CONSIDERATION OF A BUDGET FOR THE ADMINISTRATION OF THE PROTOCOL UNDER ARTICLE 19.2.6 (LP)

- 13.1 It was recalled that, pursuant to Article 19.2.6 of the Protocol, IMO should prepare, every two years, a budget and a financial account for the administration of the Protocol. At its first session in 2006, the Meeting of Contracting Parties considered a budget of direct, and indirect, costs for carrying out Secretariat duties for the London Convention and Protocol for the period 2006-2007 (document LP 1/4/1). Furthermore, the Meeting had requested the Secretariat to submit a document linking the activities in the Joint Long-term Programme for the Convention and Protocol, with possible budgetary implications, for consideration at this session. This should include a budget forecast with assumptions of the costs for the Compliance Group (LC 29/17, paragraph 14.2).
- 13.2 Document LC 30/13/2, introduced by the Secretariat, presented, first of all, the IMO budget for LC/LP Secretariat duties in 2008 (£444,570) and 2009 (£482,880) and the actual costs for these duties for 2007 (£401,500). These total amounts were derived from the IMO Regular budget and covered the personnel costs for the Office for the London Convention and Protocol; the costs for the two annual meetings, one of which with full interpretation into the

GESAMP stands for the IMO/FAO/UNESCO-IOC/WMO/IAEA/UN/UNEP/UNIDO Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection.

six UN languages; and a small travel budget for the Secretariat. For the first time, all indirect or overhead costs had been included with a clarification provided.

- 13.3 The analysis in the same document linking the activities in the Joint Long-term Programme with possible budgetary implications described several issues, including:
 - the convening of additional LC/LP meetings, which had now become a reality with the first session of the LP Compliance Group being held in parallel to this session. The conclusion here was that the annual costs of convening one Compliance Group session per year could be absorbed within the existing support provided by IMO. The main *potential* costs incurred here would be the addition, if required, of interpretation into an extra UN language and the costs were estimated per added language to range between \$4,420 and \$6,630. These costs should be borne by the LP Contracting Parties;
 - .2 the LC website, the maintenance costs of which are minimal. The costs of developing the dumping database were currently borne by the Belgian Administration as an in-kind contribution and if major alterations would be necessary in the future, it was assumed that this would again be provided by a Contracting Party in the form of an in-kind contribution;
 - .3 the costs of LC/LP publications which were either covered in their sale price or, if these publications were made available free of charge, covered in the relevant project budget funded by Contracting Parties or other donors, for example the "Guidelines for the placement of artificial reefs" being prepared for publication in 2009;
 - .4 the technical co-operation and outreach activities, which were a substantial cost factor in this overview, however, the main costs of these activities were already borne by Contracting Parties, and where common objectives were served, sometimes by IMO and other donors; and
 - specific activities with potential cost implications under the Articles 13.2.3, 19.3 and 26 of the London Protocol.

13.4 After discussion, the Meeting of Contracting Parties:

- .1 concluded that, at this stage, it had no specific requests to IMO to perform additional functions or duties for the administration of the London Protocol;
- .2 thanked IMO for the continued support it provided for this administration; and
- .3 requested the Secretariat to convey this message to the 101st session of the IMO Council in November 2008⁸.

-

See document C 101/9.

LC 30/16 - 58 -

CONSIDERATION OF THE ESTABLISHMENT OF A LONDON CONVENTION/PROTOCOL TC TRUST FUND

- 13.5 Document LC 30/13, introduced by the Secretariat contained a further developed proposal to establish a "London Convention/Protocol TC-Trust Fund" building on the discussion by the Scientific Groups in 2007 of an earlier proposal by the Secretariat. To date, the only source of funding for approved technical co-operation projects under the London Convention and Protocol had been voluntary, *ad hoc* contributions, primarily by Contracting Parties, and on a project-by-project basis. However, the potential for a TC-TF was acknowledged as an interim option in the Long-term TC Strategy of 2006, in the search for a more secure funding arrangement.
- 13.6 In the view of the Secretariat, the main three advantages were that:
 - a trust fund offered a more transparent arrangement to channel and administer the funding for approved TC projects under the LC-Technical Co-operation and Assistance Programme, reporting annually to the governing bodies;
 - a trust fund might lead to additional contributions from new donors; and
 - a trust fund might reduce the need for sometimes laborious and complicated contractual arrangements, or grant application procedures between individual donors and IMO, thereby easing the administrative burden for the Secretariat.
- 13.7 It was also recalled that in May 2008, the delegation of Spain had offered as an additional advantage that a TC-TF could assist in providing a stable basis for TC funding by potentially accessing *regular* budgets of national administrations, rather than *incidental operational* budgets.
- 13.8 The document described the key elements for a fund arrangement, such as the proposed terms of reference and where the contributions could come from. It should be stressed that contributions to the TC-TF would be *voluntary only* and not in any way become an obligation on Contracting Parties or non-Contracting Parties. A TC-TF would be established by the Secretary-General of IMO and governed under the IMO Financial Regulations and Rules with specific reporting and auditing duties. The costs/revenues of a Fund were described and interests accrued on unspent balances would flow back into the Fund.
- 13.9 If the governing bodies would agree to a TC-TF, it could become operational in the course of 2009, and it would be used to collect and administer *new funds only*, while the existing agreements between individual donors and IMO would be implemented as planned.
- 13.10 In discussion, it was confirmed that:
 - .1 donors could and should identify for which activities their contributions to the Fund should be used;

- 59 - LC 30/16

- although, as a rule, 13% of each contribution received by IMO was deducted for administrative support costs⁹, a different deduction percentage could be agreed for this purpose between individual donors and IMO; and
- .3 the annual audit costs for the Fund could be charged to it.
- 13.11 In conclusion, the governing bodies agreed recommending IMO to establish a voluntary London Convention and Protocol Technical Co-operation Trust Fund and instructed the Secretariat to advise the Secretary General of IMO accordingly.

REVIEW OF THE JOINT LONG-TERM PROGRAMME FOR THE PERIOD 2009 TO 2011

- 13.12 It was recalled that in 2004 the Consultative Meeting adopted an improved format for the Joint Long-term Programme based on a proposal of the Spanish delegation. It listed references, task managers, target dates, and the kind of action to be taken and by whom, but to understand fully what each issue was about, it had to be used in conjunction with numerous meeting reports.
- 13.13 To overcome this difficulty, the Scientific Groups adopted in 2007 a reformatted Future Work Programme for its activities that was prepared by the delegation of the United States. That document gave the same kind of references and included a description of the issues being discussed, provided a context, and showed for each issue the discussion threads across the various meeting reports. The latest version of that document was registered as LC/SG 31/13. In 2007, the governing bodies indicated they preferred that new format and agreed to use it also for their own Joint Long-term Programme and noted with gratitude the offer of the Australian delegation to assist the Secretariat with this effort.
- 13.14 The updated Joint Long-term Programme for the London Convention and Protocol for 2008 to 2010 as prepared by Australia and revised by the Secretariat, is set out in document LC 30/13/1. The document included in appendix I a table format of the Joint Long-term Programme for the period 2008 to 2010.
- 13.15 The Secretariat, having further reflected on the existence of the two Joint Work Programmes in parallel, and bearing in mind the considerable time involved in preparing and updating these documents and also that the governing bodies regularly re-prioritized the activities of the Scientific Groups when reviewing their Joint Work Programme, proposed that the two Programmes be merged into one comprehensive document. The aim would be to prepare this document immediately after each session of the governing bodies at the end of the year, which would then serve as a reference document at the start of the new meetings' season. In this proposed set-up, both the Scientific Groups and the governing bodies would focus their discussions on future work in particular on the short tables as shown in the appendices I and II to the document.

13.16 In conclusion, the governing bodies:

.1 agreed that the Chairman would update together with the Secretariat the table in appendix I of the Joint Long-term Programme for the period 2009 to 2011 in light of the achievements of this session;

-

These costs are used for procedures to select consultants and for contract and project management by the Secretariat and administration support services.

LC 30/16 - 60 -

- agreed to merge their Joint Long-term Programme with that of the Scientific Groups into one comprehensive document;
- .3 instructed the Secretariat to prepare as soon as possible the resulting comprehensive Joint Long-term Programme for distribution in all three working languages and for posting on the London Convention website; and
- .4 thanked the delegations of Australia, Spain and the United States for the work they had done on earlier versions of the Joint Long-term Programmes and the current one.

JOINT WORK PROGRAMME OF THE SCIENTIFIC GROUPS

- 13.17 The Chairman of the Scientific Groups informed the Meetings about the Joint Work Programme of the Scientific Groups as shown in their report (LC/SG 31/16, annex 12) and indicated that ocean fertilization would remain a high-priority issue (see Chapter 4 of this report), while other issues would remain as proposed by the Scientific Groups. He also informed the Meetings that the topic proposed for the "Science Day" session in 2009, based on a listing of the possible topics identified by the Groups, would be "dredged material disposal management techniques."
- 13.18 The governing bodies endorsed the table form of the Joint Work Programme of the Scientific Groups, as amended, and agreed to the topic for "Science Day" 2009, as proposed.

SUBSTANTIVE ITEMS FOR THE AGENDA AND DATES FOR THE NEXT MEETINGS

- 13.19 The Meetings reviewed the list of substantive items for the 31st Consultative Meeting and the 4th Meeting of Contracting Parties, as set out in document LC 30/WP.5 and regarded the indents listed under each substantive item as early annotations, and priorities for action, at those Meetings.
- 13.20 The Meetings adopted the "List of substantive items agreed for inclusion in the agenda for the 31st Consultative Meeting and the 4th Meeting of Contracting Parties", as amended, and as shown in annex 13 to this report. Contracting Parties were invited to prepare submissions on the priority items contained therein.
- 13.21 The delegation of Italy reconfirmed that the Italian Government would host the joint session of the 32nd LC Scientific Group and 3rd LP Scientific Group in conjunction with the IMO/UNEP Regional Workshop to promote the London and Barcelona Dumping Protocols in Rome, Italy.
- 13.22 Both governing bodies gratefully accepted this offer by Italy.

13.23 The governing bodies:

- .1 agreed the dates for the 2009 sessions to be held under the London Convention and Protocol, as shown below; and
- .2 instructed the Secretariat to inform the IMO Council accordingly.

- 61 - LC 30/16

MEETING:	LOCATION:	DATE:	
Meeting of the Intersessional Technical	IMO	Early 2009 *	
Working Group on Ocean Fertilization	Headquarters		
&			
Meeting of the LP Intersessional Legal and		* Dates yet to be confirmed	
Related Issues Working Group on Ocean			
Fertilization			
IMO/UNEP Regional Workshop to promote	FAO	20 to 22 May 2009 *	
the London and Barcelona Dumping	Headquarters in		
Protocols	Rome	* Dates yet to be confirmed	
and a second			
32 nd meeting of the LC Scientific Group	FAO	25 to 29 May 2009	
&	Headquarters in		
3 rd meeting of the LP Scientific Group	Rome		
215 C	TMO	26 + 20 0 + 1 2000	
31 st Consultative Meeting	IMO	26 to 30 October 2009	
& Ath Maria Control of the Control o	Headquarters		
4 th Meeting of Contracting Parties			
2 nd session of the LP Compliance Group	IMO	26 to 28 October 2009	
2 session of the Li Comphance Group	Headquarters	20 10 20 October 2009	
	iicauquai teis		

14 ANY OTHER BUSINESS

No issues were raised under this item of the agenda.

15 ELECTION OF OFFICERS FOR BOTH GOVERNING BODIES

- 15.1 In accordance with Rule 20 of the Revised Rules of Procedure, the Consultative Meeting unanimously elected Ms Chen Yue (China) and Mr. Matthew Johnston (Australia) as Chairman and 1st Vice-Chairman, respectively, for the intersessional period and for the 31st Consultative Meeting.
- 15.2 In accordance with Rule 20 of the Revised Rules of Procedure, the Meeting of Contracting Parties also unanimously elected Ms Chen Yue (China) and Mr. Matthew Johnston (Australia) as Chairman and 1st Vice-Chairman, respectively, for the intersessional period and for the 4th Meeting of Contracting Parties.
- 15.3 As no candidates had been nominated for the post of 2nd Vice-Chairman, both governing bodies agreed that the Secretariat would approach possible nominees via the appropriate channels and prepare a shortlist of candidates for distribution to Heads of Delegations prior to the next Meetings.
- 15.4 The Meetings praised the outgoing Chairman, Mr. Victor Escobar, for his excellent leadership in the past three years. In doing so, they recognized his important role in the smooth transition towards two governing bodies meeting together since 2006, and leading several noteworthy achievements, including the CO₂ sequestration amendment to the Protocol, as well as a wide variety of activities under way. Under his chairmanship the London Convention and Protocol had shown to be relevant and responsible agreements, contributing not only to the

LC 30/16 - 62 -

protection of the marine environment, but also acknowledging the wider environmental challenges society is facing today.

15.5 The Meetings also welcomed the new team of elected officers and offered their full support.

16 CONSIDERATION AND ADOPTION OF THE REPORT

The joint report of the 30th Consultative Meeting of Contracting Parties to the London Convention 1972 and the 3rd Meeting of Contracting Parties to the 1996 Protocol was adopted on the final day of the Meetings, Friday, 31 October 2008.

ANNEX 1

AGENDA FOR THE 30TH CONSULTATIVE MEETING AND THE 3RD MEETING OF CONTRACTING PARTIES

1 Adoption of the agenda

LC 30/1 Secretariat: Provisional Agenda

LC 30/1/1 Secretariat: Annotations to the Provisional Agenda and Draft

Timetable

LC 30/INF.7 Secretary-General: Opening Address

2 Status of the London Convention and Protocol

LC 30/2 Secretary-General: Report of the Secretary-General on the status

of the London Convention 1972

LC 30/2/1 Secretary-General: Report of the Secretary-General on the status

of the 1996 Protocol to the London Convention 1972

LC 30/INF.6 Argentina: Letter submitted by the Government of Argentina

3 Consideration of the report of the Scientific Groups

LC 30/3 Secretariat: Action by the governing bodies

LC 30/3/1 Canada: Draft Guidance for the Development of Action Lists and

Action Levels for Dredged Material

LC 30/3/2 Secretariat: Final Survey Report on Usability and Communication

of the Specific Guidelines for Waste Assessment under the London

Convention and Protocol

LC 30/INF.5 Secretariat: Adoption of the Revised Generic Waste Assessment

Guidelines

4 Ocean fertilization

LC 30/4 United Kingdom: Report of the Legal and Intersessional

Correspondence Group on Ocean Fertilization

LC 30/4/1 Greenpeace International: Comments to the Report of the Legal

and Intersessional Correspondence Group on Ocean Fertilization

(LICG)

LC 30/INF.2 United Kingdom: Report of the Legal and Intersessional Correspondence Group on Ocean Fertilization – Breakdown of comments

LC 30/INF.3 United Kingdom: Report of the Legal and Intersessional Correspondence Group on Ocean Fertilization – Full responses

LC 30/INF.4 UNEP: A compilation of recent international statements, agreements and recommendations regarding ocean fertilization

LC 30/INF.4/Add.1 UNEP: A compilation of recent international statements, agreements and recommendations regarding ocean fertilization

LC 30/WP.6 Report of the Working Group on Ocean Fertilization

5 CO₂ sequestration in sub-seabed geological formations

LC 30/WP.4 Report of the Drafting Group on the CO₂ Sequestration Reporting Format

6 Compliance issues

LC 30/6/1 Secretariat: Status of compliance with the notification and reporting requirements under Article VI(4) of the London

Convention 1972 and Article 9.4 of the London Protocol

LC 30/6/1/Corr.1 Secretariat: Corrigendum

LC 30/WP.1 Secretariat: Final draft summary report on dumping permits issued

in 2005

LC 30/WP.2 Report of the first meeting of the Compliance Group under the

1996 Protocol to the London Convention 1972

7 Technical co-operation and assistance

LC 30/7 Secretariat: Draft Implementation Plan for the 'Barriers to Compliance Project'

8 Development of guidelines for placement of artificial reefs

LC 30/8 Chairman of the Correspondence Group: Draft LC/LP – UNEP

Guidelines for the Placement of Artificial Reefs

LC 30/8/Corr.1 Secretariat: Corrigendum

LC 30/8/1 United States: Response to Draft Guidelines for the

Placement of Artificial Reefs

9 Interpretation of the London Convention and Protocol

LC 30/9 United Kingdom: Draft guidance on best management practices for

removal of anti-fouling coatings from ships, including TBT hull

paints

LC 30/9/1 Secretariat: Draft guidance on managing spoilt cargoes

LC 30/WP.7 Report of the Working Group on the development of a draft

outreach strategy for spoilt cargo management

10 Matters related to the management of radioactive wastes

No documents submitted under this agenda item.

11 Monitoring for the purposes of the London Convention and Protocol

No documents submitted under this agenda item.

Outreach to prospective new Contracting Parties to the Protocol and relations with other organizations in the field of marine environmental protection

No documents submitted under this agenda item.

13 Administrative arrangements and future work

LC 30/13 Secr	etariat: Conside	ration of a Tech	ınical Co-opera	tion Trust Fund
---------------	------------------	------------------	-----------------	-----------------

arrangement under the London Convention and Protocol

LC 30/13/1 Secretariat: Review of the Joint Long-term Programme for the

period 2009 to 2011

LC 30/13/2 Secretariat: Consideration of a various financial matters for the

administration of the London Protocol under Article 6.2

LC 30/WP.5 Chairman: Draft list of substantive items

14 Any other business

No documents submitted under this agenda item.

15 Election of Officers for both governing bodies

No documents submitted under this agenda item.

16 Consideration and adoption of the report

LC 30/16 Secretariat: Report of the 30th Consultative Meeting and

the 3rd Meeting of the Contracting Parties

LC 30/16 ANNEX 1 Page 4

LC 30/INF.1 List of Participants

LC 30/WP.3 Secretariat: Draft Report of the 30th Consultative Meeting and the 3rd Meeting of Contracting Parties

ANNEX 2

STATEMENTS ON DOCUMENTS LC 30/2 AND LC 30/2/1 "STATUS OF THE LONDON CONVENTION AND PROTOCOL"

STATEMENT BY THE DELEGATION OF ARGENTINA

"I have the honour to address Your Excellency concerning documents LC 30/2 and LC 30/2/1 of 2 October 2008 ("STATUS OF THE LONDON CONVENTION AND PROTOCOL. Report of the Secretary-General on the status of the London Convention 1972"), that contains references to the so called "Falkland Islands", "Falkland Islands and Dependencies" and "South Georgia and South Sandwich Islands" by which they are presented as separate from the Argentine Republic and under an alleged status that has been unilaterally accorded to them by their illegitimate British occupant, that has not been recognized by the international community.

In this regard, the Argentine Government recalls that the Malvinas, South Georgias and South Sandwich Islands and the surrounding maritime areas are an integral part of the territory of the Argentine Republic and, being illegitimately occupied by the United Kingdom of Great Britain and Northern Ireland, are the subject of a sovereignty dispute between both countries, recognized by the United Nations among other international and regional organizations.

Furthermore, the Argentine Government recalls that the United Nations General Assembly has adopted resolutions 2065 (XX), 3160 (XXVIII), 31/49, 37/9, 38/12, 39/6, 40/21, 41/40, 42/19 and 43/25, by which it recognizes the existence of a sovereignty dispute relating to the "Question of the Malvinas Islands" and requests the Governments of the Argentine Republic and the United Kingdom of Great Britain and Northern Ireland to resume negotiations in order to find as soon as possible a peaceful and definitive solution to the sovereignty dispute. Similarly, the United Nations Special Committee on Decolonization has repeatedly stated this same position, most recently by its resolution on the matter adopted on 12 June 2008. It is also worth noting that since 1982 the United Kingdom has not complied with the call of the international community to resume the said negotiations with the Argentine Republic on the sovereignty question.

In view of the above, the Argentine Government rejects the said documents LC 30/2 and LC 30/2/1 ("STATUS OF THE LONDON CONVENTION AND PROTOCOL. Report of the Secretary-General on the status of the London Convention 1972") as far as the said references to the so called "Falkland Islands", "Falkland Islands and Dependencies" and "South Georgia and South Sandwich Islands" are concerned and reiterates its rejection to the extension of the territorial application of the London Convention and Protocol by the United Kingdom to the Malvinas Islands, South Georgias Islands and South Sandwich Islands and the surrounding maritime areas.

The Argentine Government also objects IMO to include references to the said Argentine archipelagos, which are subject to the said sovereignty dispute, in official documents of the Organization by using only the nomenclature utilized by the illegitimate occupying power and in the case of the South Georgias and South Sandwich Islands by making no reference to the existence of the said controversy."

STATEMENT BY THE DELEGATION OF THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND

"The delegation of the United Kingdom deeply regrets that it has been forced into making an intervention under agenda item 2 following the statement by the distinguished delegate of the Argentine Republic. The UK delegation does not believe that this is the appropriate forum to raise sovereignty issues of any kind, which are outside the scope and purpose of the London Convention and Protocol.

In reference to the content of the statement made by the delegation of Argentina and to the letter recently transmitted by the Chargé d'affaires of the Argentine Embassy in London to the Secretary General of the International Maritime Organization, the Government of the United Kingdom of Great Britain and Northern Ireland has no doubt about the sovereignty of the United Kingdom over the Falkland Islands, South Georgia and the South Sandwich Islands and their surrounding maritime areas. The United Kingdom firmly rejects the claim by the Government of Argentina to sovereignty over those islands and maritime areas and their claim that these Islands are under illegal occupation by the United Kingdom.

The principle of self-determination, enshrined in the Charter of the United Nations, underlies our position on the sovereignty of the Falkland Islands. There can be no negotiation on the sovereignty of the Falkland Islands unless and until such time as the Falkland Islanders so wish. The Islanders regularly make it clear that they wish the Falkland Islands to remain under British sovereignty.

In reference to documents LC 30/2 and LC 30/2/1, referred to in the Statement by the delegation of Argentina, the United Kingdom has no doubt about its right to extend the application of the London Convention and Protocol to the aforementioned territories and maritime areas. The delegation of the United Kingdom warmly welcomes the decision by the IMO Secretariat not to make further changes to the documents in question."

ANNEX 3

REVISED GUIDELINES FOR THE ASSESSMENT OF WASTES OR OTHER MATTER THAT MAY BE CONSIDERED FOR DUMPING

1 INTRODUCTION

- 1.1 The Guidelines for the Assessment of Wastes or Other Matter that May be Considered for Dumping are intended for use by national authorities responsible for regulating dumping of wastes. They guide national authorities in evaluating applications for dumping of wastes in a manner consistent with the provisions of the London Convention 1972 (London Convention) or the 1996 Protocol thereto (London Protocol)¹. Annex 2 to the London Protocol places emphasis on progressively reducing the need to use the sea for dumping of wastes. Furthermore, it recognizes that avoidance of pollution demands rigorous controls on the emission and dispersion of contaminating substances and the use of scientifically-based procedures for selecting appropriate options for waste disposal. When applying these Guidelines uncertainties in relation to assessments of impacts on the marine environment will need to be considered and a precautionary approach applied in addressing these uncertainties. They should be applied with a view that acceptance of dumping under certain circumstances does not remove the obligation to make further attempts to reduce the necessity for dumping.
- 1.2 The London Protocol follows an approach under which dumping of wastes or other matter is prohibited except for those materials specifically identified in Annex 1. Therefore, and in the context of that Protocol, these Guidelines would apply only to the materials listed in Annex 1. The London Convention prohibits the dumping of certain wastes or other matter specified therein and in the context of that Convention these Guidelines meet the requirements of its Annexes for wastes not prohibited for dumping at sea. When applying these Guidelines under the London Convention, they should not be viewed as a tool for the reconsideration of dumping of wastes or other matter in contravention of Annex I to the London Convention.
- 1.3 The schematic shown at the appendix to this document provides a clear indication of the stages in the application of the Guidelines where important decisions should be made and is not designed as a conventional "decision tree." In general, national authorities should use the schematic in an iterative manner ensuring that all steps receive consideration before a decision is made to issue a permit. The national authority should strive to update knowledge in science and technology related to each stage of the application of the Guidelines according to its national scientific, technical and economic capabilities, bearing in mind the rapid advancement in relevant science and technology. The diagram in the appendix to this document illustrates the relationship between the operational components of Annex 2 to the London Protocol and contains the following elements:
 - .1 Waste Characterization (Chapter 4 Chemical, Physical and Biological Properties)

I:\LC\30\16.doc

The "Waste Assessment Guidelines Tutorial" (WAG Tutorial) provides additional information. The WAG Tutorial was published in 2007 and is available from the LC/LP Secretariat and the London Convention website (www.londonconvention.org). The WAG Tutorial was intended to make the Waste Assessment Guidance more accessible to national administrators, apply this Guidance as part of national evaluation procedures, and give administrations access to experiences gained elsewhere, thereby assisting states in effective implementation of the London Convention and Protocol.

- .2 Waste Prevention Audit and Waste Management Options (Chapters 2 and 3)
- .3 Action List (Chapter 5)
- .4 Identify and Characterize Dump-site (Chapter 6 Dump-site Selection)
- .5 Determine Potential Impacts and Prepare Impact Hypothesis(es) (Chapter 7 Assessment of Potential Effects)
- .6 Issue Permit (Chapter 9 Permit and Permit Conditions)
- .7 Implement Project and Monitor Compliance (Chapter 8 Monitoring)
- .8 Field Monitoring and Assessment (Chapter 8 Monitoring).
- 1.4 These Generic Guidelines are complemented by further specific guidance developed for each waste category listed in Annex 1 to the London Protocol.

2 WASTE PREVENTION AUDIT

- 2.1 The initial stages in assessing alternatives to dumping of wastes or other matter that may be considered for dumping under the London Convention or London Protocol should, as appropriate, include an evaluation of:
 - .1 types, amounts and relative hazards of wastes generated;
 - .2 details of the production process and the sources of wastes within that process; and
 - .3 feasibility of the following waste reduction/prevention techniques:
 - .1 product reformulation;
 - .2 clean production technologies;
 - .3 process modification;
 - .4 input substitution; and
 - .5 on-site, closed-loop recycling.

The techniques mentioned in paragraph 2.1.3 do not imply that wastes or other matter prohibited from disposal under the London Convention **and** London Protocol could, after application of these techniques, then be considered for dumping at sea.

- 2.2 In general terms, if the required audit reveals that opportunities exist for waste prevention at source, an applicant is expected to formulate and implement a waste prevention strategy in collaboration with relevant local and national agencies that include specific waste reduction targets and provision for further waste prevention audits to ensure that these targets are being met. Permit issuance or renewal decisions shall assure compliance with any resulting waste reduction and prevention requirements.
- 2.3 For dredged material and sewage sludge, the goal of waste management should be to identify and control the sources of contamination. This should be achieved through implementation of waste prevention strategies and requires collaboration between the local and

national agencies involved with the control of point and non-point sources of pollution. These considerations may also be relevant to other categories of wastes or other matter. Until this objective is met, the problems of contaminated dredged material may be addressed by using disposal management techniques at sea or on land.

3 CONSIDERATION OF WASTE MANAGEMENT OPTIONS

- 3.1 Applications to dump wastes or other matter shall demonstrate that appropriate consideration has been given to the following hierarchy of waste management options, which implies an order of increasing environmental impact:
 - .1 re-use;
 - .2 off-site recycling;
 - .3 destruction of hazardous constituents;
 - .4 treatment to reduce or remove the hazardous constituents; and
 - .5 disposal on land, into air and into water.
- 3.2 A permit to dump wastes or other matter shall be refused if the permitting authority determines that appropriate opportunities exist to re-use, recycle or treat the waste without undue risks to human health or the environment or disproportionate costs. The practical availability of other means of disposal should be considered in the light of a comparative risk assessment involving both dumping and the alternatives, taking into account the general obligation to apply a precautionary approach to dumping and the objective of protecting the marine environment from all sources of pollution.

4 WASTE CHARACTERIZATION, i.e. CHEMICAL, PHYSICAL AND BIOLOGICAL PROPERTIES

- 4.1 A detailed description and characterization of the waste is an essential precondition for the consideration of alternatives and the basis for a decision as to whether a waste may be dumped. If a waste is so poorly characterized that proper assessment cannot be made of its potential impacts on human health and the environment, that waste shall not be dumped.
- 4.2 Characterization of the wastes and their constituents shall take into account:
 - .1 origin, total amount, form and average composition;
 - .2 properties: physical, chemical, biochemical and biological;
 - .3 toxicity, including, where appropriate, additive, synergistic or antagonistic effects among constituents of the waste;
 - .4 persistence: physical, chemical and biological; and
 - .5 accumulation and biotransformation in biological materials or sediments.

5 ACTION LIST

- 5.1 The Action List provides a screening mechanism for determining whether a material is considered acceptable for dumping. It constitutes a crucial part of Annex 2 to the London Protocol and the Scientific Groups will continuously review all aspects of it to assist Contracting Parties with its application. It may also be used in meeting the requirements of Annexes I and II to the London Convention.
- 5.2 Each Contracting Party shall develop a national Action List to provide a mechanism for screening candidate wastes and their constituents on the basis of their potential effects on human health and the marine environment. In selecting substances for consideration in an Action List, priority shall be given to toxic, persistent and bio-accumulative substances from anthropogenic sources (e.g., cadmium, mercury, organohalogens, petroleum hydrocarbons and, whenever relevant, arsenic, lead, copper, zinc, beryllium, chromium, nickel and vanadium, organosilicon compounds, cyanides, fluorides and pesticides or their by-products other than organohalogens). The Action List may also cover other characteristics of the waste material under consideration, such as physical properties, pathogen levels, toxicity, and bioaccumulation. An Action List can also be used as a trigger mechanism for further waste prevention considerations.
- 5.3 An Action List shall specify an upper level and may also specify a lower level. The upper level should be set so as to avoid acute or chronic effects on human health or on sensitive marine organisms representative of the marine ecosystem. Application of an Action List will result in three possible categories of waste:
 - .1 wastes which contain specified substances, or which cause biological responses, *exceeding* the relevant upper level shall not be dumped, unless made acceptable for dumping through the use of management techniques or processes;
 - .2 wastes which contain specified substances, or which cause biological responses, *below* the relevant lower levels should be considered to be of little environmental concern in relation to dumping; and
 - .3 wastes that contain specified substances, or which cause biological responses, *below* the upper level but *above* the lower level require more detailed assessment before their suitability for dumping can be determined.
- 5.4 The Contracting Parties may provide guidance on Action Lists and upper and lower levels. See, for example, the Guidance for the Development of Action Lists and Action Levels for Dredged Material.

6 DUMP-SITE SELECTION

Site selection considerations

- 6.1 Proper selection of a dump-site at sea for the reception of waste is of paramount importance.
- 6.2 Information required to select a dump-site shall include:
 - .1 physical, chemical and biological characteristics of the water-column, the seabed and, as appropriate, the sub-seabed;

- .2 location of amenities, values and other uses of the sea in the area under consideration;
- assessment of the constituent fluxes associated with dumping in relation to existing fluxes of substances in the marine environment; and
- .4 economic and operational feasibility.
- 6.3 Guidance for procedures to be followed in dump-site selection can be found in a report of the Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP Reports and Studies No.16 Scientific Criteria for the Selection of Waste Disposal Sites at Sea), as well as in the recently published WAG Tutorial. Prior to selecting a dump-site, it is essential that data be available on the oceanographic characteristics of the general area in which the site is to be located. This information can be obtained from the literature but fieldwork should be undertaken to fill the gaps. Relevant information may include:
 - .1 the nature of the seabed and, as appropriate, the sub-seabed, including its topography, geochemical and geological characteristics, its biological composition and activity, and prior dumping activities affecting the area;
 - .2 the physical nature of the water column, including temperature, depth, possible existence of a thermocline/pycnocline and how it varies in depth with season and weather conditions, tidal period and orientation of the tidal ellipse, mean direction and velocity of the surface and bottom drifts, velocities of storm-wave induced bottom currents, general wind and wave characteristics, and the average number of storm days per year, suspended matter; and
 - .3 the chemical and biological nature of the water column, including pH, salinity, dissolved oxygen at surface and bottom, chemical and biochemical oxygen demand, nutrients and their various forms and primary productivity.
- 6.4 Some of the important amenities, biological features and uses of the sea to be considered in determining the specific location of the dump-site are:
 - .1 the shoreline and bathing beaches;
 - .2 areas of beauty or significant cultural or historical importance;
 - .3 areas of special scientific or biological importance, such as sanctuaries;
 - .4 fishing areas;
 - .5 spawning, nursery and recruitment areas;
 - .6 migration routes;
 - .7 seasonal and critical habitats;
 - .8 shipping lanes;
 - .9 military exclusion zones; and
 - .10 engineering uses of the seafloor, including mining, undersea cables, desalination or energy conversion sites.

Size of the dump-site

- 6.5 Size of the dump-site is an important consideration for the following reasons:
 - .1 it should be large enough, unless it is an approved dispersion site, to have the bulk of the material remain either within the site limits or within a predicted area of impact after dumping;
 - .2 it should be large enough to accommodate anticipated volumes of solid waste and/or liquid wastes to be diluted to near background levels before or upon reaching site boundaries;
 - it should be large enough in relation to anticipated volumes for dumping so that it would serve its function for many years; and
 - .4 it should not be so large that monitoring would require undue expenditure of time and money.

Site capacity

- 6.6 In order to assess the capacity of a site, especially for solid wastes, the following should be taken into consideration:
 - .1 the anticipated loading rates per day, week, month or year;
 - .2 whether or not it is a dispersive site; and
 - .3 the allowable reduction in water depth over the site because of mounding of material.

In the case of sub-seabed geological formations, both the feasibility of the carbon-dioxide stream injection site and the integrity of the site will need to be established.

Evaluation of potential impacts

- 6.7 An important consideration in determining the suitability of a waste for dumping at a specific site is the degree to which this results in increased exposures of organisms to substances that may cause adverse effects. In this respect, ambient water quality standards/guidelines as established by national authorities provide useful benchmarks to make judgements about acceptable perturbations of water quality resulting from disposal activities.
- 6.8 The physical impacts of many of the wastes permitted to be disposed of at sea can be significant and may be dominant for some wastes such as inert, inorganic geological material and dredged material. While physical impacts within a disposal site may be acceptable, licensing authorities will usually seek to minimize or prevent physical impacts outside the boundaries of disposal sites. Particular attention needs to be paid to the degree to which deposition of and subsequent transport of material outside the disposal site may result in physical effects on marine benthos (e.g., smothering, changes in benthos diversity, habitat modification), on sediment transport fluxes and processes and on other uses of the sea such as those listed in paragraph 6.4 above.

- 6.9 The extent of adverse effects of a substance depends in part on the exposures of organisms (including humans). Exposure, in turn, is a function, *inter alia*, of input flux and the physical, chemical and biological processes that control the transport, behaviour, fate and distribution of a substance.
- 6.10 The presence of natural substances and the ubiquitous occurrence of contaminants mean that there will always be some pre-existing exposures of organisms to all substances contained in any waste that might be dumped. Concerns about exposures to hazardous substances thus relate to additional exposures as a consequence of dumping. This, in turn, can be translated back to the relative magnitude of the input fluxes of substances from dumping compared with existing input fluxes from other sources.
- 6.11 Accordingly, due consideration needs to be given to the relative magnitude of the substance fluxes associated with dumping in the local and regional area surrounding the dump-site. In cases where it is predicted that dumping will substantially augment existing fluxes associated with natural processes, dumping at the site under consideration should be deemed inadvisable.
- 6.12 In the case of synthetic substances, the relationship between fluxes associated with dumping and pre-existing fluxes in the vicinity of the site may not provide a suitable basis for decisions.
- 6.13 Temporal characteristics should be considered to identify potentially critical times of the year (e.g., for marine life) when dumping should not take place. This consideration leaves periods when it is expected that dumping operations will have less impact than at other times. If these restrictions become too burdensome and costly, there should be some opportunity for compromise in which priorities may have to be established concerning species to be left wholly undisturbed. Examples of such biological considerations are:
 - .1 periods when marine organisms and birds are migrating from one part of the ecosystem to another (e.g., from an estuary to open sea or *vice versa*) and growing and breeding periods;
 - .2 periods when marine organisms are hibernating on or are buried in the sediments; and
 - .3 periods when particularly sensitive and possibly endangered species are exposed.

Contaminant mobility

- 6.14 Contaminant mobility is dependent upon several factors, among which are:
 - .1 type of matrix;
 - .2 form of contaminant;
 - .3 contaminant partitioning:
 - .4 physical state of the system, e.g., temperature, water flow, suspended matter;
 - .5 physico-chemical state of the system;
 - .6 length of diffusion and advection pathways; and
 - .7 biological activities, e.g., bioturbation.

7 ASSESSMENT OF POTENTIAL EFFECTS

- 7.1 Assessment of potential effects should lead to a concise statement of the expected consequences of the sea or land disposal options, i.e. the "Impact Hypothesis." It provides a basis for deciding whether to approve or reject the proposed disposal option and for defining environmental monitoring requirements. As far as possible, waste management options causing dispersion and dilution of contaminants in the environment should be avoided and preference given to techniques that prevent the input of the contaminants to the environment.
- 7.2 The assessment for dumping should integrate information on waste characteristics, conditions at the proposed dump-site(s), fluxes and proposed disposal techniques and specify the potential effects on human health, living resources, amenities and other legitimate uses of the sea. It should define the nature, temporal and spatial scales and duration of expected impacts based on reasonably conservative assumptions.
- 7.3 The assessment should be as comprehensive as possible. Alterations to the physical environment, risks to human health, devaluation of marine resources and interference with other legitimate uses of the sea are often seen as primary concerns in this regard. Additionally, long-term and indirect potential impacts should, as appropriate, be assessed and addressed in permitting and monitoring requirements.
- 7.4 In constructing an impact hypothesis, particular attention should be given to, but not limited to, potential impacts on amenities (e.g., presence of floatables), sensitive areas (e.g., spawning, nursery or feeding areas), habitat (e.g., biological, chemical and physical modification), migratory patterns and marketability of resources. Consideration should also be given to potential impacts on other uses of the sea including: fishing, navigation, engineering uses, areas of special concern and value, and traditional uses of the sea.
- 7.5 Even the least complex and most innocuous wastes may have a variety of physical, chemical and biological effects. Impact hypotheses cannot attempt to reflect them all. It must be recognized that even the most comprehensive impact hypotheses may not address all possible scenarios such as unanticipated impacts. It is therefore imperative that the monitoring programme be linked directly to the hypotheses and serve as a feedback mechanism to verify the predictions and review the adequacy of management measures applied to the dumping operation and at the dump-site. It is important to identify the sources and consequences of uncertainty.
- 7.6 The expected consequences of dumping should be described in terms of affected habitats, processes, species, communities and uses. The precise nature of the predicted effect (e.g., change, response, or interference) should be described. The effect should be quantified in sufficient detail so that there would be no doubt as to the variables to be measured during field monitoring. In the latter context, it would be essential to determine "where" and "when" the impacts can be expected.
- 7.7 Emphasis should be placed on biological effects and habitat modification as well as physical and chemical change. However, if the potential effect is due to substances, the following factors should be addressed:
 - .1 estimates of statistically significant increases of the substance in seawater, sediments, or biota in relation to existing conditions and associated effects; and

- .2 estimate of the contribution made by the substance to local and regional fluxes and the degree to which existing fluxes pose threats or adverse effects on the marine environment or human health.
- 7.8 In the case of repeated or multiple dumping operations, impact hypotheses should take into account the cumulative effects of such operations. It will also be important to consider the possible interactions with other waste dumping practices in the area, existing or planned.
- 7.9 An analysis of each disposal option should be considered in light of a comparative assessment of the following concerns: human health risks, environmental costs, hazards (including accidents), economics and exclusion of future uses. If this assessment reveals that adequate information is not available to determine the likely effects of the proposed disposal option, including potential long-term harmful consequences, then this option should not be considered further. In addition, if the interpretation of the comparative assessment shows the dumping option to be less preferable, a permit for dumping should not be given.
- 7.10 Each assessment should conclude with a statement supporting a decision to issue or refuse a permit for dumping.
- 7.11 Where monitoring is required, the potentially adverse effects and variables considered in the hypotheses should help to guide field and analytical work so that relevant information can be obtained in the most efficient and cost-effective manner.

8 MONITORING

- 8.1 Monitoring is used to verify that permit conditions are met compliance monitoring and that the assumptions made during the permit review and site selection process were correct and sufficient to protect the environment and human health field monitoring. It is essential that such monitoring programmes have clearly defined objectives.
- 8.2 The Impact Hypothesis forms the basis for defining field monitoring. The measurement programme should be designed to ascertain that changes in the receiving environment are within those predicted. The following questions must be answered:
 - .1 What testable hypotheses can be derived from the Impact Hypothesis?
 - .2 What measurements (type, location, frequency, performance requirements) are required to test these hypotheses?
 - .3 How should the data be managed and interpreted?
- 8.3 It may usually be assumed that suitable specifications of existing (pre-disposal) conditions in the receiving area are already contained in the application for dumping. If the specification of such conditions is inadequate to permit the formulation of an Impact Hypothesis, additional information will be required by the licensing authority before any final decision on the permit application is made.
- 8.4 The permitting authority is encouraged to take account of relevant research information in the design and modification of monitoring programmes. The measurements can be divided into two types those within the zone of predicted impact and those outside.

- 8.5 Measurements should be designed to determine whether the zone of impact and the extent of change outside the zone of impact differ from those predicted. The former can be answered by designing a sequence of measurements in space and time that ensures that the projected spatial scale of change is not exceeded. The latter can be answered by the acquisition of measurements that provide information on the extent of change that occurs outside the zone of impact as a result of the dumping operation. The extent of change shall be evaluated relative to the baseline state of the environment. This baseline state should be either based on the newly selected dump-site prior to its use in the case of a new dump-site, or on a nearby zone where historical dumping has not induced changes to the environment. Frequently, these measurements will be based on a null hypothesis that no significant change can be detected. Measurements should also take into account those physical, chemical and biological characteristics identified during the waste characterization phase.
- 8.6 The results of monitoring (or other related research) should be reviewed at regular intervals in relation to the objectives and can provide a basis to:
 - .1 modify or terminate the field-monitoring programme;
 - .2 modify or revoke the permit;
 - .3 redefine or close the dump-site or take other appropriate remediation or mitigation measures; and
 - .4 modify the basis on which applications to dump wastes are assessed.

9 PERMIT AND PERMIT CONDITIONS

- 9.1 A decision to issue a permit should only be made if all impact evaluations are completed and the monitoring requirements are determined. The provisions of the permit shall ensure, as far as practicable, that environmental disturbance and detriment are minimized and the benefits maximized. Any permit issued shall contain data and information specifying:
 - .1 the types, amounts and sources of materials to be dumped;
 - .2 the location of the dump-site(s);
 - .3 the method of dumping; and
 - .4 monitoring and reporting requirements.

In cases where a rapid response could be required to address adverse impacts, the need for a mitigation plan should also be considered.

9.2 If dumping is the selected option, then a permit authorizing dumping must be issued in advance. It is recommended that opportunities are provided for public review and participation in the permitting process. In granting a permit, the hypothesized impact occurring within the boundaries of the dump-site, such as alterations to the physical, chemical and biological compartments of the local environment is accepted by the permitting authority. If the information provided is inadequate to determine whether a project would pose a significant risk to human health or the environment, the permitting authority should request additional

information before taking a decision on issuing a permit. If it becomes evident that a project would pose significant risks to human health or the marine environment, or the information provided is still inadequate to make a decision, a permit shall not be issued.

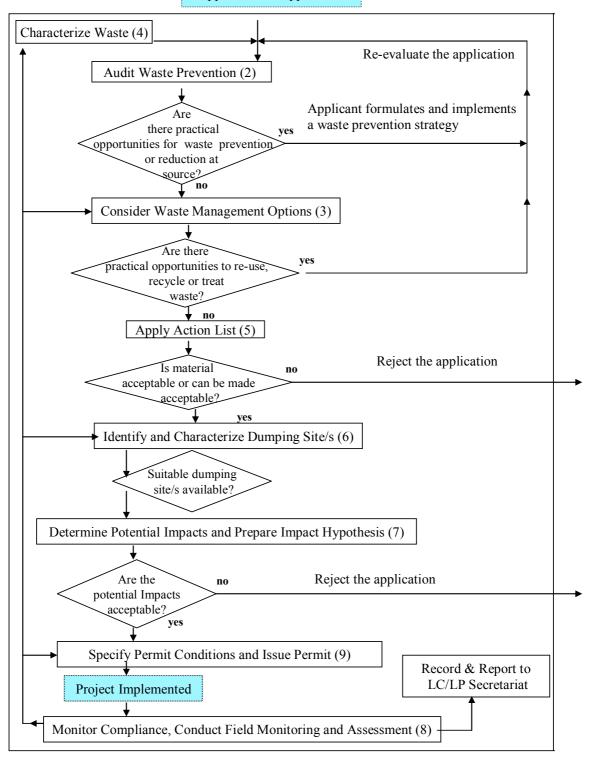
- 9.3 Regulators should strive at all times to enforce procedures that will result in environmental changes as far below the limits of allowable environmental change as practicable, taking into account technological capabilities as well as economic, social and political concerns.
- 9.4 Permits should be reviewed at regular intervals, taking into account the results of monitoring and the objectives of monitoring programmes. Review of monitoring results will indicate whether field programmes need to be continued, revised or terminated, and will contribute to informed decisions regarding the continuance, modification or revocation of permits. This provides an important feedback mechanism for the protection of human health and the marine environment.
- 9.5 The duration of potential impacts should be considered in determining the appropriate periods of time for retaining permits and other supporting documentation.

Appendix

The relationship among important operational components of Annex 2 of the London Protocol and Annexes I and II of the London Convention is drawn as a schematic diagram in this appendix. The Arabic numerals in parenthesis correspond to the pertinent section in the text. This schematic is intended to assist national authorities to consider all regulatory aspects including reviewing the application received, issuing a permit(s), managing the project site, reporting and keeping the records. This schematic provides a clear indication of the stages in the application of this guidance where important decisions should be made. In general, national authorities should use this schematic in an iterative manner ensuring that all steps receive consideration before a decision is made to issue a permit.

APPENDIX

Applicant files application



ANNEX 4

REVISED SPECIFIC GUIDELINES FOR THE ASSESSMENT OF INERT, INORGANIC GEOLOGICAL MATERIAL

1 INTRODUCTION

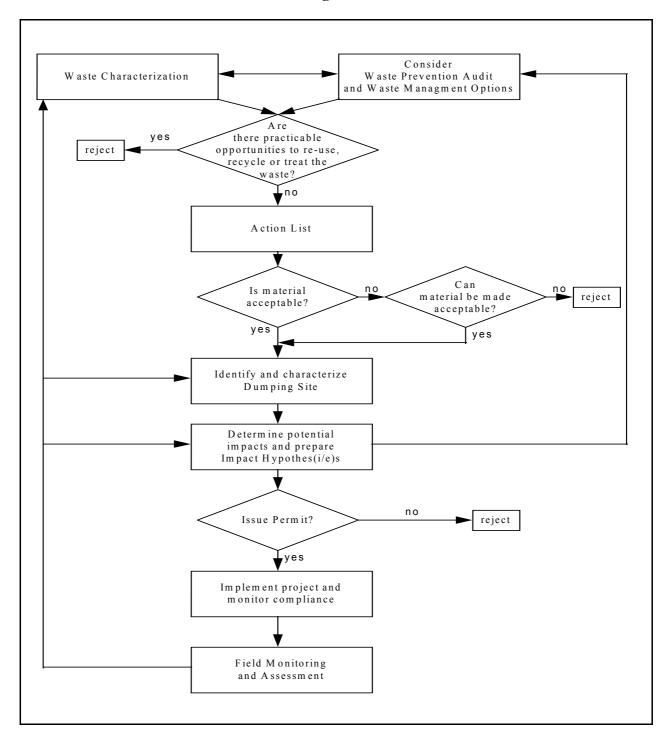
- 1 1 The Guidelines for the Assessment of Wastes or Other Matter that May be Considered for Dumping¹, referred to in short as the "Generic Guidelines", as well as the Specific Guidelines for the Assessment of Inert, Inorganic Geological Material addressed in this document are intended for use by national authorities responsible for regulating dumping of wastes and embody a mechanism to guide national authorities in evaluating applications for dumping of wastes in a manner consistent with the provisions of the London Convention 1972 (London Convention) or the 1996 Protocol thereto (London Protocol). Annex 2 to the London Protocol places emphasis on progressively reducing the need to use the sea for dumping of wastes. Furthermore, it recognizes that avoidance of pollution demands rigorous controls on the emission and dispersion of contaminating substances and the use of scientifically based procedures for selecting appropriate options for waste disposal. When applying these Guidelines uncertainties in relation to assessments of impacts on the marine environment will need to be considered and a precautionary approach applied in addressing these uncertainties. They should be applied with a view that acceptance of dumping under certain circumstances does not remove the obligation to make further attempts to reduce the necessity for dumping.
- 1.2 The London Protocol follows an approach under which dumping of wastes or other matter is prohibited except for those materials specifically enumerated in Annex 1, and in the context of that Protocol, these Guidelines would apply to the materials listed in that Annex. The London Convention prohibits the dumping of certain wastes and other matter specified therein and in the context of that Convention these Guidelines meet the requirements of its Annexes for wastes not prohibited for dumping at sea. When applying these Guidelines under the London Convention, they should not be viewed as a tool for the reconsideration of dumping of wastes or other matter in contravention of Annex I to the London Convention.
- 1.3 The schematic shown in Figure 1 provides a clear indication of the stages in the application of the Guidelines where important decisions should be made and is not designed as a conventional "decision tree". In general, national authorities should use the schematic in an iterative manner ensuring that all steps receive consideration before a decision is made to issue a permit. Figure 1 illustrates the relationship between the operational components of Annex 2 of the London Protocol and contains the following elements:
 - .1 Waste Characterization (Chapter 4) (Chemical, Physical and Biological Properties);
 - .2 Waste Prevention Audit and Waste Management Options (Chapters 2 and 3);
 - .3 Action List (Chapter 5);

-

The first version of these Guidelines was adopted in 1997 and their revision was completed by the governing bodies under the London Convention and Protocol in 2008.

- .4 Identify and Characterize Dump-site (Chapter 6) (Dump-site Selection);
- .5 Determine Potential Impacts and Prepare Impact Hypothesis(es) (Chapter 7) (Assessment of Potential Effects);
- .6 Issue Permit (Chapter 9) (Permit and Permit Conditions);
- .7 Implement Project and Monitor Compliance (Chapter 8) (Monitoring); and
- .8 Field Monitoring and Assessment (Chapter 8) (Monitoring).

Figure 1



1.4 These Guidelines are specific to inert, inorganic geological material², i.e., wastes or other matter which have been determined, through an initial qualitative characterization, to have met the Eligibility Criteria for Inert, Inorganic Geological Material (appendix). Adherence to the

The Twenty-second Consultative Meeting of Contracting Parties to the London Convention 1972 adopted these specific Guidelines in 2000.

following represents neither a more restrictive nor a less restrictive regime than that of the Generic Guidelines of 1997.

2 WASTE PREVENTION AUDIT

- 2.1 The initial stages in assessing alternatives to dumping should, as appropriate, include an evaluation of:
 - .1 types, amounts and relative hazards of wastes generated. As the material is inert, the relative hazards are confined to those resulting from the physical properties of the material;
 - .2 details of the production process and the sources of wastes within that process; and
 - .3 feasibility of the following waste reduction/prevention techniques:
 - .1 clean production technologies;
 - .2 process modification;
 - .3 input substitution; and
 - .4 on-site, closed-loop recycling.
- 2.2 In general terms, if the required audit reveals that opportunities exist for waste prevention at source, an applicant is expected to formulate and implement a waste prevention strategy in collaboration with relevant local and national agencies which includes specific waste reduction targets and provision for further waste prevention audits to ensure that these targets are being met. Permit issuance or renewal decisions shall assure compliance with any resulting waste reduction and prevention requirements.
- 2.3 For this category of material the most pertinent issue will be waste minimization.

3 CONSIDERATION OF WASTE MANAGEMENT OPTIONS

- 3.1 Applications to dump wastes or other matter shall demonstrate that appropriate consideration has been given to the following hierarchy of waste management options, which implies an order of increasing environmental impact:
 - .1 re-use, such as refilling of mines;
 - .2 recycling such as road construction and building materials; and
 - .3 disposal on land, and into water.
- 3.2 A permit to dump wastes or other matter shall be refused if the permitting authority determines that appropriate opportunities exist to re-use, recycle or treat the waste without undue risks to human health or the environment or disproportionate costs. The practical availability of other means of disposal should be considered in the light of a comparative risk assessment involving both dumping and the alternatives.

4 CHEMICAL, PHYSICAL AND BIOLOGICAL PROPERTIES

- 4.1 The character and form of the material and the basis on which it is characterized as geological and inert in the marine environment should be specified. From this specification, it should be demonstrated that the chemical nature of the material (including uptake of any elements or substances from the material by biota) is such that the only effects will be due to its physical properties. Thus, the assessment of the environmental impacts will be based solely upon origin, mineralogy, and the total amount and physical nature of the material.
- 4.2 Characterization of the material and its constituents shall take into account:
 - origin, including mineralogy, total amount, and the form in which it is intended to be dumped; and
 - .2 physical persistence.

5 ACTION LIST

5.1 The Action List provides a screening mechanism for determining whether a material is considered acceptable for dumping. It constitutes a crucial part of Annex 2 to the London Protocol and the Scientific Groups will continuously review all aspects of it to assist Contracting Parties with its application. It may also be used in meeting the requirements of Annexes I and II to the London Convention. As inert materials should not interact with biological systems other than through physical processes, Action List considerations generally do not require detailed consideration for this waste category. However, the Action List screening mechanism should be used to demonstrate that the material is inert and uncontaminated.

6 DUMP-SITE SELECTION

Site selection considerations

- 6.1 Proper selection of a dump-site at sea for the reception of waste is of paramount importance.
- 6.2 Information required to select a dump-site shall include:
 - .1 physical, chemical and biological characteristics of the water-column and the seabed;
 - .2 location of amenities, values and other uses of the sea in the area under consideration;
 - .3 assessment of the constituent fluxes associated with dumping, particularly in relation to existing sediment fluxes; and
 - .4 economic and operational feasibility.
- 6.3 Guidance for procedures to be followed in dump-site selection can be found in a report of the Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP Reports and Studies No.16 Scientific Criteria for the Selection of Waste Disposal

Sites at Sea), as well as in the WAG tutorial set. Prior to selecting a dump-site, it is essential that data be available on the oceanographic characteristics of the general area in which the site is to be located. Relevant information may include the physical, chemical and biological nature of the seabed and the water column. This information can be obtained from the literature but fieldwork should be undertaken to fill the gaps. In terms of chemical and biological characteristics, only those aspects likely to be sensitive to physical effects such as smothering or to changes in turbidity, particle size distributions or sediment transport require detailed consideration.

- 6.4 Some of the important amenities, biological features and uses of the sea to be considered in determining the specific location of the dump-site are:
 - .1 the shoreline and bathing beaches;
 - .2 areas of beauty or significant cultural or historical importance;
 - areas of special scientific or biological importance, such as sanctuaries;
 - .4 fishing areas;
 - .5 spawning, nursery and recruitment areas;
 - .6 migration routes;
 - .7 seasonal and critical habitats:
 - .8 shipping lanes;
 - .9 military exclusion zones;
 - .10 engineering uses of the seafloor, including mining, undersea cables, desalination or energy conversion sites.

Size of the dump-site

- 6.5 Size of the dump-site is an important consideration for the following reasons:
 - .1 it should be large enough, unless it is an approved dispersion site, to have the bulk of the material remain either within the site limits or within a predicted area of impact after dumping;
 - .2 it should be large enough to accommodate anticipated volumes of solid waste and/or liquid wastes to be diluted to near background levels before or upon reaching site boundaries;
 - it should be large enough in relation to anticipated volumes for dumping so that it would serve its function for many years; and
 - .4 it should not be so large that monitoring would require undue expenditure of time and money.

Site capacity

- 6.6 In order to assess the capacity of a site, especially for solid wastes, the following should be taken into consideration:
 - .1 the anticipated loading rates per day, week, month or year;
 - .2 whether or not it is a dispersive site; and

.3 the allowable reduction in water depth over the site because of mounding of material.

Evaluation of potential impacts

- 6.7 Due consideration needs to be given to the relative magnitude of the substance fluxes associated with dumping in the local and regional area surrounding the dump-site. In cases where it is predicted that dumping will substantially augment existing fluxes associated with natural processes, dumping at the site under consideration should be deemed inadvisable. The only fluxes that are relevant to inert, inorganic geological material are sediment transport fluxes in the water column and at the sediment-water interface. Particular attention needs to be paid to the degree to which deposition of material may result in effects on marine benthos (e.g., smothering, changes in benthos diversity, habitat modification).
- 6.8 Temporal characteristics should be considered to identify potentially critical times of the year (e.g., for marine life) when dumping should not take place. This consideration leaves periods when it is expected that dumping operations will have less impact than at other times. If these restrictions become too burdensome and costly, there should be some opportunity for compromise in which priorities may have to be established concerning species to be left wholly undisturbed. Examples of such biological considerations are:
 - .1 periods when marine organisms are migrating from one part of the ecosystem to another (e.g., from an estuary to open sea or vice versa) and growing and breeding periods;
 - .2 periods when marine organisms are hibernating on or are buried in the sediments; and
 - .3 periods when particularly sensitive and possibly endangered species are exposed.

The primary considerations relevant to these provisions are the physical effects of inert, inorganic geological materials on biota in the water column and benthos, including those which arise as a result of habitat modification.

Contaminant mobility

- 6.9 Contaminant mobility is dependent upon several factors, among which are:
 - .1 type of matrix;
 - .2 form of contaminant:
 - .3 physical state of the system, e.g., temperature, water flow, suspended matter; and
 - .4 biological activities, e.g., bioturbation.

These issues should not be relevant for an inert, inorganic geological material that passes the Eligibility Criteria and for the reasons given in paragraphs 4.1 and 5.1 above.

7 ASSESSMENT OF POTENTIAL EFFECTS

- 7.1 Assessment of potential effects should lead to a concise statement of the expected consequences of the sea or land disposal options, i.e., the "Impact Hypothesis". It provides a basis for deciding whether to approve or reject the proposed disposal option and for defining environmental monitoring requirements. As far as possible, waste management options causing dispersion and dilution of contaminants in the environment should be avoided and preference given to techniques that prevent the input of the contaminants to the environment.
- 7.2 The assessment for dumping should integrate information on waste characteristics, conditions at the proposed dump-site(s), fluxes and proposed disposal techniques and specify the potential effects on human health, living resources, amenities and other legitimate uses of the sea. It should define the nature, temporal and spatial scales and duration of expected impacts based on reasonably conservative assumptions.
- 7.3 The assessment should be as comprehensive as possible. The primary potential impacts should be identified during the dump-site selection process. These are considered to pose the most serious threats to human health and the environment. Alterations to the physical environment are the primary concern for inert, inorganic geological material, and thus impacts on habitats and human health, the devaluation of marine resources and interference with other legitimate uses of the sea are likely to be seen as the main concerns.
- 7.4 In constructing an impact hypothesis, particular attention should be given to, but not limited to, potential impacts on amenities (e.g., presence of floatables), sensitive areas (e.g., spawning, nursery or feeding areas), habitat (e.g., biological, chemical and physical modification), migratory patterns and marketability of resources. Consideration should also be given to potential impacts on other uses of the sea including: fishing, navigation, engineering uses, areas of special concern and value, and traditional uses of the sea.
- 7.5 Even the least complex and most innocuous wastes may have a variety of physical, chemical and biological effects. Impact hypotheses cannot attempt to reflect them all. It must be recognized that even the most comprehensive impact hypotheses may not address all possible scenarios such as unanticipated impacts. It is therefore imperative that the monitoring programme be linked directly to the hypotheses and serve as a feedback mechanism to verify the predictions and review the adequacy of management measures applied to the dumping operation and at the dump-site. It is important to identify the sources and consequences of uncertainty. The only effects requiring detailed consideration in this context are physical impacts on habitats and marine resources and interference with other legitimate uses of the sea.
- 7.6 The expected consequences of dumping should be described in terms of affected habitats, processes, species, communities and uses. The precise nature of the predicted effect (e.g., change, response or interference) should be described. The effect should be quantified in sufficient detail so that there would be no doubt as to the variables to be measured during field monitoring. In the latter context, it would be essential to determine "where" and "when" the impacts can be expected.
- 7.7 Emphasis should be placed on biological effects and habitat modification, as well as physical and chemical changes, including:
 - .1 physical changes and physical effects on biota; and

- .2 effects on sediment transport.
- 7.8 In the case of repeated or multiple dumping operations, impact hypotheses should take into account the cumulative effects of such operations. It will also be important to consider the possible interactions with other waste dumping practices in the area, both existing or planned.
- 7.9 An analysis of each disposal option should be considered in light of a comparative assessment of the following concerns: human health risks, environmental costs, hazards (including accidents), economics and exclusion of future uses. If this assessment reveals that adequate information is not available to determine the likely effects of the proposed disposal option, including potential long-term harmful consequences, then this option should not be considered further. In addition, if the interpretation of the comparative assessment shows the dumping option to be less preferable, a permit for dumping should not be given.
- 7.10 Each assessment should conclude with a statement supporting a decision to issue or refuse a permit for dumping.
- 7.11 Where monitoring is required, the effects and parameters described in the hypotheses should help to guide field and analytical work so that relevant information can be obtained in the most efficient and cost-effective manner.

8 MONITORING

- 8.1 Monitoring is used to verify that permit conditions are met compliance monitoring and that the assumptions made during the permit review and site selection process were correct and sufficient to protect the environment and human health field monitoring. It is essential that such monitoring programmes have clearly defined objectives.
- 8.2 The Impact Hypothesis forms the basis for defining field monitoring. The measurement programme should be designed to ascertain that changes in the receiving environment are within those predicted. The following questions must be answered:
 - .1 What testable hypotheses can be derived from the Impact Hypothesis?
 - .2 What measurements (type, location, frequency, performance requirements) are required to test these hypotheses?
 - .3 How should the data be managed and interpreted?
- 8.3 It may usually be assumed that suitable specifications of existing (pre-disposal) conditions in the receiving area are already contained in the application for dumping. If the specification of such conditions is inadequate to permit the formulation of an Impact Hypothesis, the licensing authority will require additional information before any final decision on the permit application is made.
- 8.4 The permitting authority is encouraged to take account of relevant research information in the design and modification of monitoring programmes. The measurements can be divided into two types those within the zone of predicted impact and those outside.

- 8.5 Measurements should be designed to determine whether the zone of impact and the extent of change outside the zone of impact differ from those predicted. The former can be answered by designing a sequence of measurements in space and time that ensures that the projected spatial scale of change is not exceeded. The latter can be answered by the acquisition of measurements that provide information on the extent of change that occurs outside the zone of impact as a result of the dumping operation. Frequently, these measurements will be based on a null hypothesis that no significant change can be detected.
- 8.6 The results of monitoring (or other related research) should be reviewed at regular intervals in relation to the objectives and can provide a basis to:
 - .1 modify or terminate the field-monitoring programme;
 - .2 modify or revoke the permit;
 - .3 redefine or close the dump-site; and
 - .4 modify the basis on which applications to dump wastes are assessed.

9 PERMIT AND PERMIT CONDITIONS

- 9.1 A decision to issue a permit should only be made if all impact evaluations are completed and the monitoring requirements are determined. The provisions of the permit shall ensure, as far as practicable, that environmental disturbance and detriment are minimized and the benefits maximized. Any permit issued shall contain data and information specifying:
 - .1 the types, amounts and sources of materials to be dumped;
 - .2 the location of the dump-site(s);
 - .3 the method of dumping; and
 - .4 monitoring and reporting requirements.
- 9.2 If dumping is the selected option, then a permit authorizing dumping must be issued in advance. It is recommended that opportunities are provided for public review and participation in the permitting process. In granting a permit, the hypothesized impact occurring within the boundaries of the dump-site, such as alterations to the physical, chemical and biological compartments of the local environment is accepted by the permitting authority.
- 9.3 Regulators should strive at all times to enforce procedures that will result in environmental changes as far below the limits of allowable environmental change as practicable, taking into account technological capabilities as well as economic, social and political concerns.
- 9.4 Permits should be reviewed at regular intervals, taking into account the results of monitoring and the objectives of monitoring programmes. Review of monitoring results will indicate whether field programmes need to be continued, revised or terminated, and will contribute to informed decisions regarding the continuance, modification or revocation of permits. This provides an important feedback mechanism for the protection of human health and the marine environment.

APPENDIX

ELIGIBILITY CRITERIA FOR INERT, INORGANIC GEOLOGICAL MATERIAL

BACKGROUND AND PURPOSE

- The London Convention 1972 (LC), as amended in 1993, prohibits the dumping of industrial waste after 1 January 1996. It further provides in Annex I that the term "industrial waste means waste materials generated by manufacturing or processing operations and does not apply to", among other things, "uncontaminated inert geological materials the chemical constituents of which are unlikely to be released into the marine environment".
- The 1996 Protocol to the London Convention 1972 (LP) follows an approach under which the dumping of all wastes or other matter is prohibited except for those materials specifically enumerated in Annex 1 to the 1996 Protocol. The Protocol states that "the following wastes or other matter are those that may be considered for dumping being mindful of the objectives and general obligations set out in Articles 2 and 3", including, "inert, inorganic geological material".
- 3 Both LC and LP prohibit dumping of waste with more than *de minimis* radioactivity. Separate guidance on how to make that determination can be found in the "Guidelines for the Application of the *De Minimis* Concept under the London Convention 1972" and will not be further addressed in this document.
- This document provides guidance for determining whether candidate materials can initially be considered as inert, inorganic geological material eligible for further consideration for dumping under LC or LP. If the proposed materials are found eligible for consideration under this category, this does not mean they should necessarily receive a permit for dumping at sea. The decision on whether to issue such a permit can only be made after carefully taking into account the "Specific Guidelines for Assessment of Inert, Inorganic Geological Material" (IIGM Guidelines). The IIGM Guidelines are used to evaluate applications for dumping of eligible waste under LC or LP, and include waste prevention audits, consideration of alternatives to dumping, characterization of the potential dump site, rigorous assessment for potential impacts, and monitoring.
- 5 The wording regarding geological materials differs slightly between LC and LP³. This document provides narrative criteria for use in determining whether material is:
 - .1 "uncontaminated inert geological materials the chemical constituents of which are unlikely to be released into the marine environment" (LC terminology); and
 - .2 "inert, inorganic geological material" (LP terminology).

For example, the IIGM Guidelines apply to LC and to LP since it has now entered into force.

LC 30/16 ANNEX 4 Page 12

- If, after considering these criteria, the material is deemed to fall outside the scope of the relevant category, it is either (1) ineligible for consideration for dumping or (2) may constitute a different category of waste or other matter eligible for consideration under other material-specific guidance.⁴
- 7 In order to apply this guidance, it will be necessary to perform an initial qualitative characterization of the waste or other matter to be considered for dumping.
- 8 The applicable criteria in the following guidance will need to be satisfied if the material can initially be considered as "uncontaminated inert geological material" (LC) or "inert, inorganic geological material" (LP).

GUIDANCE

STEP 1: TYPE OF MATERIAL - "GEOLOGICAL"

Discussion

9 Both under LC and LP proposed materials must be geological in nature. To be a geological material it should only comprise materials from the solid portion of the Earth such as rock or mineral. In addition, the geological material should not be altered from its original state by physical or chemical processing in a way that would result in different or additional impacts to the marine environment compared with those expected from the unaltered material.

Decision Criteria

- 10 Questions to determine whether the candidate material is geological:
 - .1 does the candidate material only comprise materials from the solid mineral portion of the Earth; and
 - .2 has the material been altered from its original state by physical or chemical processing in a way that would result in different or additional impacts to the marine environment compared with those expected from the unaltered material?
- 11 If the answer to 10.1 above is **YES** and the answer to 10.2 is **NO**, the material is geological in nature.
- 12 If the answer to 10.1 is **NO** or the answer to 10.2 is **YES**, the material is not geological and cannot be considered for dumping as IIGM.

Other guidance documents address the other types of material eligible for consideration for dumping (i.e., dredged material, sewage sludge, fish waste, vessels and platforms, organic material of natural origin, certain bulky items).

STEP 2: TYPE OF MATERIAL - "INERT"

Discussion

- Under both LC and LP the geologic material must be "inert" in order to be considered for dumping⁵. In order to be inert, the candidate material and its constituents must be essentially of a chemically non-reactive nature and the chemical constituents of the material are unlikely to be released into the marine environment. The primary issue in determining whether a material is inert for the purposes of the Convention is to ensure that the only impacts of concern following dumping are restricted to physical effects⁶. In making such a determination, consideration must be given not only to pre-disposal characteristics of the material but also to whether it may undergo significant physical, chemical, or biological transformations when deposited in a marine system.
- 14 Key factors in determining if a proposed material is inert are knowledge of the material's constituents, including any potential contaminants, and what, if any, reactions might occur following the material's exposure to physical, chemical, or biological processes in the marine environment. Material that may result in acute or chronic toxicity, or in bioaccumulation of any of its constituents, should not be considered inert.

Decision Criteria

- 15 Considering both the pre-disposal nature of the material and any alterations to it that may result from physical, chemical, or biological processes in the sea, are the only effects of concern those resulting from the physical properties of the material?
- 16 If the answer to the above is **YES**, the material is inert.
- 17 If the answer is **NO**, the material is not inert and may not be considered for dumping as IIGM.

STEP 3: TYPE OF MATERIAL – "INORGANIC" (LP only)

Discussion

Under LP, candidate geologic materials must be inorganic materials. These materials are usually of mineral origin. Materials such as sand, salt, iron, calcium salts and other mineral materials are examples. If a material does not contain more than incidental and trivial amounts of compounds with carbon chemically bound to hydrogen, it is also considered inorganic.

Under LC it is also specified that its chemical constituents must be unlikely to be released into the marine environment. A determination that the material is "inert" undertaken in accordance with this guidance document will also satisfy that aspect of LC.

In paragraph 5.1 of the IIGM Guidelines eligible materials are described as those "inert materials [that] will not interact with biological systems other than through physical processes."

The term "inorganic" is used in LP, but not in LC. As a result, this criterion is only relevant in the LP – context.

Decision Criteria

- 19 Inorganic materials are usually of mineral origin. Other materials may be deemed inorganic if they contain only incidental and trivial amounts of compounds with carbon chemically bound to hydrogen. Questions to determine whether candidate geological materials are inorganic:
 - .1 are the materials of inorganic mineral origin; and
 - .2 does the material contain no more than incidental and trivial amounts of compounds with carbon chemically bound to hydrogen?
- 20 If the answer to both (1) and (2) is **YES**, the material is inorganic.
- If the answer to either (1) or (2) is **NO**, it is not inorganic and cannot be considered for dumping as IIGM.

STEP 4: TYPE OF MATERIAL - "UNCONTAMINATED" (LC only)⁸

Discussion

- 22 As stated in Annex I of LC, candidate geological material must be uncontaminated.
- Contaminants are constituents that are potentially harmful to the marine environment and are:
 - .1 introduced to the material through anthropogenic activities; or
 - .2 concentrated in the material to a magnitude greater than naturally found in geologically similar material.
- Material exposed only to ambient, widely dispersed, contamination (e.g., typically through atmospheric deposition or precipitation) should not be deemed "contaminated".

Decision Criteria

- 25 Questions to determine whether candidate geological materials are uncontaminated:
 - .1 have contaminants been introduced at the material's source? (e.g., has the material been exposed to spills or other sources of contamination or subject to inadequate pollution controls); and
 - .2 have contaminants been introduced or concentrated beyond a magnitude greater than naturally found in geologically similar material during any subsequent processing or modification of the material?
- If the answer to both of the above questions is **NO**, the material can be considered uncontaminated.

The term "uncontaminated" is only used under LC. As a result, this criterion is only relevant in the LC context.

If the answer to either of the questions above is **YES**, the material is contaminated and, therefore, may not be considered for dumping as uncontaminated IIGM unless it can be verified that all necessary steps have been taken to remove the contaminants.

ANNEX 5

STATEMENT BY THE DELEGATION OF VANUATU ON OCEAN FERTILIZATION

- "Ocean fertilization has become more and more attractive to private companies due to the huge financial opportunities which represent this process. The recent application of the International Emissions Trading Association (IETA), representing more than 180 companies, to become an observer to the London Convention and Protocol meetings is a good example.
- Vanuatu is classified as a Least Developing State and belongs to these countries where marine resources are crucial. As everyone might be aware of, reduction of CO₂ emissions is not a major issue for Vanuatu given our very low level of emissions. However, Vanuatu does not want to suffer from the actions of other nations that could endanger the oceans and its marine species on which Vanuatu has always relied.
- The scientific community does not know the possible side-effects of large-scale iron fertilization and it could possibly take decades of ocean fertilization before noticing such side effects. We should not risk iron fertilization on the scale needed to affect global CO₂ levels or animal populations. Creating blooms in naturally iron-poor areas of the ocean is like watering the desert: you are completely changing one type of ecosystem into another. As with any human interventions in an ecological system, the act of fertilization sets off a sequence of events that can become complex and difficult to monitor.
- 4 This delegation firmly believes that global warming must be solved at the source, the effects of large scale iron fertilization experiments could be catastrophic and Vanuatu expresses its strong opposition to manipulating ocean ecosystems in this manner."

ANNEX 6

RESOLUTION LC-LP.1 (2008) ON THE REGULATION OF OCEAN FERTILIZATION (ADOPTED ON 31 OCTOBER 2008)

THE THIRTIETH MEETING OF THE CONTRACTING PARTIES TO THE LONDON CONVENTION AND THE THIRD MEETING OF THE CONTRACTING PARTIES TO THE LONDON PROTOCOL,

RECALLING the objectives of the London Convention¹ and Protocol²;

NOTING that the 'Statement of concern' on large-scale ocean fertilization by the Scientific Groups in June 2007 endorsed by the 29th Consultative Meeting and the 2nd Meeting of Contracting Parties in November 2007, and expanded on by the Scientific Groups in May 2008, remains valid;

NOTING decision IX/16 on 30 May 2008 of the 9th Meeting of the Conference of the Parties to the Convention on Biological Diversity which "requests Parties and urges other Governments, in accordance with the precautionary approach, to ensure that ocean fertilization activities do not take place until there is an adequate scientific basis on which to justify such activities, including assessing associated risks, and a global, transparent and effective control and regulatory mechanism is in place for these activities; with the exception of small scale scientific research studies within coastal waters";

NOTING United Nations General Assembly resolution 62/215, concerning "Oceans and the law of the sea", adopted on 22 December 2007, which in its paragraph 98 "encourages States to support the further study and enhance understanding of ocean iron fertilization";

NOTING that a number of other international organizations are considering the issue of ocean fertilization;

NOTING that knowledge on the effectiveness and potential environmental impacts of ocean fertilization is currently insufficient to justify activities other than legitimate scientific research;

1. AGREE that the scope of the London Convention and Protocol includes ocean fertilization activities:

[&]quot;Contracting Parties shall individually and collectively promote the effective control of all sources of pollution of the marine environment, and pledge themselves especially to take all practicable steps to prevent the pollution of the sea by the dumping of waste and other matter that 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."

(Article II of the London Convention).

[&]quot;Contracting Parties shall individually and collectively protect and preserve the marine environment from all sources of pollution and take effective measures, according to their scientific, technical and economic capabilities, to prevent, reduce and where practicable eliminate pollution caused by dumping or incineration at sea of wastes or other matter. Where appropriate, they shall harmonize their policies in this regard." (Article 2 of the London Protocol).

- **2. AGREE** that for the purposes of this resolution, ocean fertilization is any activity undertaken by humans with the principle intention of stimulating primary productivity in the oceans³:
- **3. AGREE** that in order to provide for legitimate scientific research, such research should be regarded as placement of matter for a purpose other than the mere disposal thereof under Article III.1(b)(ii) of the London Convention and Article 1.4.2.2 of the London Protocol;
- **4. AGREE** that scientific research proposals should be assessed on a case-by-case basis using an assessment framework to be developed by the Scientific Groups under the London Convention and Protocol;
- **5. AGREE** that the aforementioned assessment framework should include, *inter alia*, tools for determining whether the proposed activity is contrary to the aims of the Convention and Protocol;
- **6. AGREE** that until specific guidance is available, Contracting Parties should be urged to use utmost caution and the best available guidance⁴ to evaluate the scientific research proposals to ensure protection of the marine environment consistent with the Convention and Protocol:
- 7. **AGREE** that for the purposes of this resolution, legitimate scientific research should be defined as those proposals that have been assessed and found acceptable under the assessment framework;
- **8. AGREE** that, given the present state of knowledge, ocean fertilization activities other than legitimate scientific research should not be allowed. To this end, such other activities should be considered as contrary to the aims of the Convention and Protocol and not currently qualify for any exemption from the definition of dumping in Article III.1(b) of the Convention and Article 1.4.2 of the Protocol;
- **9. AGREE** that this resolution should be reviewed at appropriate intervals in light of new and relevant scientific information and knowledge.

_

Ocean fertilization does not include conventional aquaculture, or mariculture, or the creation of artificial reefs.

Such guidance includes, but is not limited to: previous agreements of the Consultative Meetings/Meetings of Contracting Parties; Annex III to the London Convention and Annex 2 to the London Protocol; the considerations for evaluating ocean fertilization proposals developed by the Scientific Groups (LC/SG 31/16, annex 2, appendix 3); and the Revised Generic Waste Assessment Guidance (LC 30/16).

ANNEX 7

REPORT OF THE 1ST MEETING OF THE COMPLIANCE GROUP UNDER THE LONDON PROTOCOL

INTRODUCTION

- 1.1 The 1st Meeting of the Compliance Group under the 1996 Protocol to the London Convention 1972 was convened at the IMO Headquarters, London, from 27 to 29 October 2008.
- 1.2 All of the members of the Compliance Group were in attendance:

Mr. Mongezi Ngoro (South Africa)

Prof. Hisakazu Kato (Japan)

Ms Zhou Qian (China)

Ms Marinka Bogdanova (Bulgaria)

Ms Anne Daniel (Canada)

Captain Federico Crescenzi (Italy)

- 1.3 Observers from the following Contracting Parties to the London Protocol also attended the meeting: Japan, Kenya, Marshall Islands and Spain.
- 1.4 Observers from the following Contracting Party to the London Convention also attended the meeting: the United States.
- 1.5 An observer from the following intergovernmental organization also attended the meeting: International Association for Ports and Harbours (IAPH).

2 ELECTION OF CHAIRMAN AND VICE-CHAIRMAN

The Group elected Ms Anne Daniel as Chairman and Ms Zhou Qian as Vice-Chairman for the current term, taking into account the need for continuity and the fact that they had both been elected for three terms.

3 ADOPTION OF THE AGENDA

The agenda for the meeting (LC-CG 1/1) was adopted with the addition of the issue under item 5.4, at the request of the Meeting of Contracting Parties, to examine paragraph 3.5 of the Compliance Procedures and Mechanisms (CPM).

4 ORGANIZATIONAL MATTERS

The Group briefly discussed organizational matters and agreed to try to complete its work by Wednesday noon, which it did, in order to have the report available in all UN working languages by Thursday morning.

5 OUTSTANDING ISSUES OF LANGUAGE OF WORK AND CONFLICT OF INTEREST

- 5.1 The Group **recommended** that:
 - .1 its working language would be English;
 - since submissions regarding individual situations of possible non-compliance and related background documents may be submitted to the Group in other languages than English, translation may be requested as needed (see document LC 30/13/2, paragraph 3.2);
 - during meetings, where a Party appears to discuss its compliance situation, interpretation may be required, if requested by the Party; and
 - .4 its reports be made available in all six UN languages, including at this meeting by annexing this report to the report of the 3rd Meeting of Contracting Parties.
- 5.2 After reviewing how the issue of conflict of interest is addressed in the compliance procedures of other environmental conventions and protocols, the Group **recommended** that a flexible statement on how these issues will be handled by the Group would be appropriate for the time being, as suggested in the paragraph below:

Each member of the Compliance Group shall, with respect to any matter that is under consideration by the Group, avoid perceived or actual conflict of interest. Where a member finds himself or herself faced with a perceived or actual conflict of interest, that member shall bring the issue to the attention of the Group before consideration of that particular matter. Where the Group decides that there is a perceived or actual conflict of interest, the concerned member shall not participate in the elaboration and adoption of the recommendation of the Group in relation to that matter.

5.3 The Group was of the view that it would be a conflict of interest for a member to participate in the consideration of a matter involving the country that nominated the member.

Examination of paragraph 3.5 of the CPM

- 5.4 As requested by the Meeting of Contracting Parties, the Group examined paragraph 3.5 of the CPM to determine whether any changes are needed to the text. The Group **recommended** that:
 - .1 no changes to the paragraph are needed at this time; and
 - as a matter of urgency, regional groups not fully represented in the Group take advantage of the special procedure for the initial elections to nominate members to the Compliance Group intersessionally, in order to achieve a full slate before the 2nd meeting of the Group.

6 CONSIDERATION OF ANY REPORTS REFERRED UNDER PARAGRAPHS 6.2, 6.3, 6.4 OR 6.5 OF THE CPM

- 6.1 The issue of reports referred to the Compliance Group under paragraph 6.2, 6.3, 6.4 and 6.5 of the CPM were discussed in detail by the Group. Additional clarification regarding the reporting cycle was provided by the Secretariat through Mr. René Coenen.
- 6.2 With respect to dumping reports referred to the Compliance Group, as per paragraph 6.2 of the CPM, the Group **recommended** that it rely on the detailed review of such reports by the Scientific Group as a means of identifying potential issues of non-compliance that should be drawn to the attention of the Compliance Group. However, the Group observed that the reports available to it at this meeting covered a period prior to the entry into force of the Protocol, and to properly evaluate compliance with reporting obligations in the future it would need to see reports covering the post-entry into force period, as they become available.
- 6.3 CPM paragraph 6.3 refers to reports under London Protocol Articles 9.4.2 and 9.4.3, which address the administrative and legislative measures taken to implement the Protocol, and their effectiveness. The Group was advised that so far no reports have been requested or received under LP Articles 9.4.2 and 9.4.3. The Group therefore **recommended** that:
 - .1 existing Parties to the Protocol submit their first report under LP Articles 9.4.2 and 9.4.3 as soon as possible, but no later than 1 September 2009. A separate request for reporting under these Articles should be sent out by the Secretariat as soon as possible;
 - .2 new Parties to the Protocol in 2008 and subsequently submit their first report under LP Articles 9.4.2 and 9.4.3 as soon as possible, but no later than 3 years after the Protocol has entered into force for them; and
 - .3 once these first reports have been received, the Compliance Group will make recommendations as to the periodicity of reporting, as indicated in the final paragraph of LP Article 9.
- 6.4 The Group also discussed the possible format of reporting under LP Articles 9.4.2 and 9.4.3. It was agreed that, at least in this initial stage of reporting, no new format or template should be developed, but that this issue might be revisited by the Group at a later stage.
- 6.5 Since no "Incident Information Forms" had been received by the Secretariat (LP Article 10.3), no referral has been made by the Meeting of Contracting Parties to the Compliance Group.
- 6.6 Similarly, since no notification has been made under LP Article 26.1 (Transitional Period), no reports have been referred to the Group by the Meeting of Contracting Parties pursuant to CPM paragraph 6.5. The Group **recommended** that in all Protocol outreach activities, potential Protocol parties be advised of the existence of Article 26, noting that its availability expires in March 2011.

7 FUTURE WORK PROGRAMME

- 7.1 The Group discussed a number of possibilities for its future work programme. Although no submissions of individual Party non-compliance have been made, the Group felt that such matters should receive priority attention. Further, the Group invited Mr. Edward Kleverlaan from the Secretariat to present the "Barriers to Compliance Project" (LC 30/7), who noted that there may be several instances where the Compliance Group may be able to provide help, in particular from a legal perspective. The Group also noted that many of the activities under the "Barriers to Compliance Project" could help promote compliance, as well as the use of LP Article 26, and wanted to study this matter further.
- 7.2 The Group **recommended** the following future work programme for the period up to and including its 2^{nd} Meeting:
 - .1 individual cases of possible non-compliance would be treated as a priority in the work programme when they arise;
 - .2 to study the Final Report of the "Barriers to Compliance Project" (LC 29/INF.2) and consider how the work of the Compliance Group can both contribute to and benefit from the Project;
 - .3 to review dumping reports referred to the Compliance Group pursuant to paragraph 6.2 of the CPM, including where concerns have been raised by the LP Scientific Group;
 - .4*¹ to identify and review the factors contributing to the difficulties experienced by Contracting Parties in fulfilling their reporting obligations under Art. 9.4 of the Protocol;
 - .5* to identify options to address those factors:
 - .6* to make recommendations for improving the rate of reporting under the Protocol;
 - .7* because the Contracting Parties to the London Convention recognize that this review may be useful to them as well, they request that the Group also consider the applicability of these options to the rate of reporting under Article VI(4) of the London Convention;
 - .8 to examine reports received under LP Articles 9.4.2 and 9.4.3; and
 - .9 to examine how to make the Guidance on National Implementation of the Protocol a more effective tool for prospective Parties (e.g., providing links to a variety of implementing legislation).

All indents with an * have been specifically added by the Meeting of Contracting Parties (see paragraph 6.27 of the main report).

8 ANY OTHER BUSINESS

- 8.1 The Group **recommended** that its next meeting take place in parallel with the Meeting of Contracting Parties, for reasons of efficiency and cost.
- 8.2 In addition to the review of reports pursuant to paragraphs 6.2, 6.3, 6.4 and 6.5 of the CPM and the items listed under the future work programme, the Group **recommended** adding individual submissions as a standing agenda item.
- 8.3 It was agreed that the Chairman would follow up with the Secretariat to ensure that the IAEA is informed of its role under the CPM, pursuant to paragraph 4.6.
- 8.4 The Group agreed to work intersessionally by e-mail correspondence or telephone as needed to further its work programme. Although no extraordinary meetings were planned in the intersessional period, the Group **observed** that, should a case arise involving an individual submission of an emergency nature, the Chairman and Vice-Chairman would consult with the Bureau of the Meeting of Contracting Parties before calling such an extraordinary meeting.

ANNEX 8

REVISED TABLES OF THE ELECTRONIC REPORTING FORMAT UNDER THE LONDON CONVENTION AND PROTOCOL

8

FORMAT FOR REPORTING ON CARBON DIOXIDE STREAMS FOR DISPOSAL INTO SUB-SEABED GEOLOGICAL FORMATIONS UNDER THE LONDON PROTOCOL

Table 1 – Summary of number of permits issued and tonnes licensed year _____ (yyyy)

Contracting Party				
Waste category	Number of permits issued	Number of operations regulated by other means	Tonnes licensed* (dry weight)	Notes
Dredged material				
Inert Material				
Fish waste				
Vessels				
Platforms				
Sewage sludge				
Organic materials				
Bulky waste				
Carbon Dioxide Streams				

^{*} For Carbon Dioxide Streams the amount is to include the stream in its entirety, see Table 3 for chemical composition.

Table 2 Details of deposit sites and dumping methods¹

LC/LP codes		Catego	ries of w	aste						Dredged material			Total quantity		Geograpinear	Active/ Inactive Site	Notes
Deposit	Dredged	Inert	Fish	Vessels	Platforms	Sewage	Organic	Bulky	Carbon	Origin:	Dredging operat	tion type 3					
Site	Material	Material	Waste			sludge	materials	waste	Dioxide	Name of							
									Stream ²	water							
										system				Number ⁴	Latitude	A: Active	
											Capital	Maintenance	Dry weight		Longitude 5	I: Inactive	

Reference Notes:

¹ Dumping means in the case of Carbon Dioxide Stream disposal into sub-seabed geological formations

² Include the injected Carbon Dioxide Stream in its entirety, see Table 3 for Chemical Composition

³ See definitions in Part I Table 2

Number of vessels; platforms dumped
 For Carbon Dioxide Stream: co-ordinates of injection well(s) is included in Table 3 and should not be reported in this table

Table 3 – Details of Carbon Dioxide Stream Storage Sites¹ and Permits

This reporting format should be used for annual reporting of Carbon Dioxide Streams for disposal into sub-seabed geological formations under Article 9 of the London Protocol and supplements the information in Tables 1 and 2. Contracting Parties should refer to the Specific Guidelines for Assessment of Carbon Dioxide Streams for Disposal into Sub-seabed Geological Formations for guidance.

Contracting Party				
Reporting year	(yyyy)	Date of repor	ting	_(dd/mm/yyyy)
Name of storage p	oroject			
LC/LP ID Site Nu	ımber ²			
Type of geologica	l formation			
	itions of injection we		_	-
Injection well	Latitude	Longitude	Active/Inactive	
# 1				
# 2				
# 3				
Geographic extent	t of storage formatio	n to be utilized (bou	ındina coordinates)(i	include man):
	Longitude		manig coordinates)	merude map).
Latitude	Dongitude			
		-		
		_		
Minimum depth o	f storage formation	to be utilized	metres belo	w sea-level
Maximum depth of	of storage formation	to be utilized	metres belo	w sea-level
Date of first inject	tion(dd/mm/	yyyy) Date of last is	njection(d	d/mm/yyyy)
Amount injected ³	in the reporting year	r	tones	

[&]quot;Carbon Dioxide Stream Storage Site" in this document refers to: "Carbon Dioxide Streams for disposal into sub-seabed geological formations" in the terms of the London Protocol; "Storage of carbon dioxide streams in geological formations" in the terms of the OSPAR Convention; and "Carbon dioxide transport, injection and geological storage" in the terms of the IPCC 2006 Guidelines.

LC/LP ID Site Number as provided in Table 2.

Include the Carbon Dioxide Stream in its entirety.

LC 30/16	
ANNEX 8	
Page 4	

Cumulative storag	ge ³ , including the repo	orting year, taking into account any leakage and the results
of monitoring	tonnes	S
-		
Chemical composi	ition of the Carbon D	Dioxide Stream ⁴ :
Compound	% of stream	
CO_2		
-		
-		
Date of last monitor	oring report ⁵	_ (dd/mm/yyyy)
G C :	6	
taken at site:	itoring*, significant n	nonitoring results and, if appropriate, mitigation measures
taken at site.		

_

The level of detail should be sufficient to cover the issues described in Section 5.3 of the Specific Guidelines for Assessment of Carbon Dioxide Streams for Disposal into Sub-seabed Geological Formations.

Contracting Parties are invited to submit monitoring reports, including reports satisfying Article 9.1.3 of the London Protocol, and to include such reports submitted under regional conventions.

See Section 8 (8.7 – 8.10) of the Specific Guidelines for Assessment of Carbon Dioxide Streams for Disposal into Sub-seabed Geological Formations. Additional information may be found in Section 6.20 – 6.23 of the Risk Assessment and Management Framework for CO₂ Sequestration in Sub-seabed Geological Structures (2006).

ANNEX 9

IMPLEMENTATION PLAN OF THE 'BARRIERS TO COMPLIANCE' PROJECT (2008)

TABLE OF CONTENTS

1	Background and introduction	2
2	Project budget	2
3	Project responsibility and management	3
4	Overview of activities	3
5	Project reporting and review	5
6	Project work plan	5
API	PENDIX	6
Des	scription of Activities	6

1 Background and introduction

- 1.1 In 2006/2007, the governing bodies of the London Convention and Protocol undertook a global review to identify barriers to accession to, implementation of and compliance with international sea dumping controls (in 'developing' countries) with a view to expand their membership to the Protocol and improve implementation (compliance) with these agreements to better protect the marine environment. The global review proposed a "set of recommendations for follow-up projects" or 'activities' aimed at capacity building to remove known barriers, impediments to compliance with the London Convention and Protocol and recommend ways to overcome these (refer Final Report of the Barriers to Compliance Project annex to document LC 29/INF.2).
- 1.2 The governing bodies reviewed several technical co-operation and assistance activities contained within the Final Report and adopted a strategic approach to implement these (annex 8 to document LC 29/17). This approach would help to prioritize support for States to overcome the legislative, institutional, technical and socio-economic barriers that have been identified towards full compliance with the London Protocol.
- 1.3 This document sets out an implementation plan of the Barriers to Compliance (B2C) Project for a number of activities that match initial funding and in-kind pledges that have already been received. The activities in this document are based on the recommendations found in the Final Report of the B2C Project. The implementation plan can be used by Parties to identify activities that may be of particular interest, whether as a donor and/or offering a particular skill or as a (future) recipient. It is envisaged that as additional funding becomes available this document will be revised and up-dated accordingly.

2 Project budget

2.1 The following pledges¹ were made for contributions to execute this project:

NO:	COUNTRY/ORGANIZATION:	CONTRIBUTIONS/PLEDGES IN US\$:
1	Australia (AUD\$60,000) for 2008	*59,000
	- 2009	
2	Canada (C\$25,000) for 2008	*26,000
3	Canada (C\$25,000) for 2009	*20,200
4	China for 2008 and 2009	In kind support
5	France ² ($\le 350,000$)	*453,000
6	Italy (€10,000) for 2008	*14,409
7	Netherlands	(amount yet to be confirmed)
8	Republic of Korea	(amount yet to be confirmed)
9	Spain (€30,000) for 2009	*37,482
10	Sweden ³ for 2009 - 2011	250,000

Status 27 November 2008.

-

An initial application has been approved in July 2008 by the Steering Committee of the "Fonds Français pour l'Environnement Mondial" (FFEM), for the period 2009-2011/2012 aimed at access to funds and focussing on support for selected countries in the Mediterranean Sea Area. An important precondition for awarding an FFEM-grant is co-funding for between 50% and 66% from other sources.

An application has been submitted to the Swedish International Development Co-operation Agency (Sida), the outcome of which is not yet known at this stage.

11	United States for 2008 – 2009	*79,200
12	United States for 2009	*100,000
13	United Kingdom (£20,000)	*30,800
14	UNEP for 2008 - 2009	*30,828
15	Greenpeace International	In kind support
16	IMO-ITCP	*~250,000
	TOTAL	1,350,919

Contribution confirmed, or funds received.

2.2 IMO – ITCP funding for this project focuses on countries in Eastern Europe and the CIS States, Mediterranean Sea, Asia-Pacific, the Gulfs area and West Africa for the period 2008 to 2009.

3 Project responsibility and management

- 3.1 A B2C Steering Group was established at the meeting of governing bodies in November 2007 to oversee and guide the further planning and implementation of the project. China, Italy, the Republic of Korea, the United States, UNEP and UNEP/MAP offered to be included in the B2C Steering Group. The approach agreed by the governing bodies is set out in annex 8 to document LC 29/17 entitled a Strategic approach to implementation of the 'Barriers to Compliance' Project.
- 3.2 The present members of the Steering Group will be assisted by the Bureau (Secretariat and Chairpersons and Vice-Chairpersons of the governing bodies and Scientific Groups). Noting the size of the project and the work involved in its implementation, due consideration should be given to the possibility of assistance to the Secretariat in terms of human resources for the management of the project, as well as for expansion of the small pool of suitable consultants to carry out the activities.

4 Overview of activities

4.1 The B2C Project will include a number of activities, each of which are introduced below. More detailed descriptions of the activities in terms of key dates, inputs and outputs are set out in the Appendix to this document (in English only). It should be noted that at this early stage of programming, some flexibility is needed to guarantee the maximum benefit to recipient and host countries. Therefore, the precise timing and outputs may vary during the delivery phases.

4.1.1 Generic Activities

Rationale: work that could produce benefit for a number of countries, or the whole programme, and should be conducted as a priority, mostly at the 'global' level:

.1 Develop and promulgate awareness raising and outreach packages addressed to various possible target groups such as pilot countries⁴ other recipient countries, donors and regional programmes and organizations;

Pilot countries must be a developing country or economy in transition and be representative of the 15 Regional Seas of the world. They should have a certain level of base institutional capacity to ensure a high chance of success as well as a willingness to commit national resources. (See LC 29/INF.2, table 5).

- Develop a global inventory of dumping activities in recent years, to provide a better understanding of what is being dumped where including outside of the LC/LP reporting system. A contract has been agreed with CEFAS (United Kingdom) to prepare this report in the period 1 April 2008 to 31 March 2009;
- .3 Develop and promulgate the *Guidance on National Implementation of LP* (including in all UN languages); The guidance would serve countries that wish to develop their administrative, institutional, legal and technical frameworks and systems to access, implement and comply with the LC/LP system; and
- .4 Develop and promulgate model national legislation in all UN languages (possibly different versions e.g., catering for British, French and US style legal systems).

4.1.2 <u>Regional Workshops</u>

Rationale: A small number of regional workshops would be held to inform countries on the need to and the benefits of ratifying the London Protocol. One or two countries will then be invited to participate as pilot countries.

- .1 Regional Workshop for the Black Sea and Caspian Sea Countries Baku, Azerbaijan (15 17 December 2008);
- .2 Regional Workshop in West Africa Anglophone countries⁵;
- .3 Regional Workshop in West Africa Francophone countries;
- .4 Regional Workshop for Mediterranean countries in collaboration with UNEP/MAP and the Government of Italy (envisaged for May 2009);
- .5 Regional Workshop in SPREP Region (March 2009);
- .6 Regional Workshop for Latin-American countries tbd; and
- .7 Additional regions should be considered South East Asia (COBSEA); South Asia (SACEP); Wider Caribbean Area.

4.1.3 National consultancies and/or targeted seminars

Rationale: National consultancies will be carried out, following or in conjunction with a needs assessment in a pilot country.

- .1 Needs assessment followed by in-depth assistance to Turkey;
- .2 Needs assessment followed by in-depth assistance to Thailand (follow-up to Dalian Regional Workshop held in June 2006);
- Needs assessment followed by in-depth assistance to Indonesia (follow-up to ROPME Regional Workshop held in June 2006);
- .4 Needs assessment followed by in-depth assistance to Oman (follow-up to ROPME Regional Workshop held in February 2007);
- .5 Needs assessment followed by in-depth assistance to Egypt (pilot country);
- Needs assessment followed by in-depth assistance to Iran (follow-up to ROPME regional Workshop held in February 2007);

⁵ Conducted from 2 to 4 July 2008.

- .7 Needs assessment followed by in-depth assistance to Algeria (pilot country); and
- .8 Additional countries should be considered.

4.1.4 Specific legal or scientific type activities:

- .1 Technical and scientific activities that could be tasked to the Scientific Groups (in the form of guiding workshops or seminars, provision of experts, etc.) or through regional bodies' activities; and
- .2 Capacity building in legal aspects could be provided by various legal training bodies, such as IOI, IDC or UNEP to assist with the development of national laws.

4.1.5 <u>Strategies to engage pilot countries (Parties and non-Parties):</u>

- .1 The Secretariat, in co-operation with a donor country/partner organization, should write to potential pilot countries (Parties and non-Parties) and determine whether they would be interested to be part of the project;
- .2 Develop collaborative arrangements and activities with regional bodies (such as the Regional Seas Conventions and Action Plans) with a view to long-term support for London Protocol outreach and capacity building activities;
- .3 Assist pilot countries in developing targeted national communication and awareness campaigns to inform legislators and stimulate political will to act (include highlighting the value of joining the global regime (LP) as opposed to remaining or joining in regional regimes); and
- .4 Provide guidance and support pilot countries to develop and implement economic incentives to encourage waste reduction practices and cost recovery mechanisms (including 'user pays' and 'polluter pays' approaches and penalties for illegal dumping).

5 Project reporting and review

An annual report will be produced by the Secretariat and the Steering Group and made available to the Scientific Groups for comment/review and/or to the governing bodies for consideration/approval. This will enable Parties to monitor and evaluate progress towards implementing the activities and their effectiveness. If needed, the governing bodies may modify activities or withdraw them if they have not yet commenced and are considered not suitable any longer. New activities may also be proposed and added to the project.

6 Project work plan

A draft GANTT chart, set out at the final page of the Appendix hereto, provides an overview of the activities currently planned.

APPENDIX (In English only)

Description of Activities

A Funded activities

Activity No. 1 (May be amended)

Title	IMPLEMENTATION OF THE 'BARRIERS TO COMPLIANCE' PROJECT IN CIS AND EASTERN EUROPE						
Duration:	3 Days	Time Line: 06/04/2009 – 08/04/2009					
Region:	CIS/EASTERN EUROPE	Sub regi	on:	BLACK SEA COUNTRIES			
Donor:	IMO-ITCP Fund		\$19,0	00			
Host Country:	Turkey						
Subject Matter:	Dumping of wastes at sea (LC)						
Discipline:	Marine Environment Protection						
Recipient Countries:	Turkey						
Brief Description:	Work towards identification of b	arriers to	compli	ance with the London Protocol to the			
	London Convention in Turkey a	nd subseq	uently	the removal of (some of) the barriers			
	thus identified.						
Inputs:	Needs assessment mission by consultant (-s) (fees, travel and DSA), and IMO Staff (travel and DSA), followed by legal, technical and administrative advice, possible via						
	a focussed National Workshop.	tha aasta i	f marti	singuta at National Workshop(a)			
	In-kind support by host to cover Provision of publications/course			ripants at National Workshop(s).			
Outputs:	1			rol toohnical administrative) of the			
Outputs:				gal, technical, administrative) of the			
Implementation Officer	London Protocol and subsequent ratification of the London Protocol.						
Implementation Officer:	Edward Kleverlaan						

Activity No. 2 (In preparation)

Title:	LONDON PROTOCOL REGIONAL WORKSHOP					
Duration:	3 Days	Time Line: 15/12/2008 – 17/12/2008		15/12/2008 - 17/12/2008		
Region:	CIS/EASTERN EUROPE	Sub reg	REGION-WIDE			
Donor:	IMO-ITCP Fund		\$49,0	00		
Host Country:	Azerbaijan					
Subject Matter:	Dumping of Wastes at Sea (LC)					
Discipline:	Marine Environment Protection					
Recipient Countries:	Turkmenistan, Ukraine, Uzbekis	tan, Rom	ania, R	ussian Federation, Iran, Kazakhstan,		
	Georgia, Azerbaijan, Bulgaria					
Brief Description:				als from the recipient countries, will		
	sensitize countries to the need to					
Inputs:	The consultant to act as a resour	rce persor	at the	Workshop, together with IMO staff.		
	Host-ship facilities to be covered					
Outputs:			t count	ries sensitized in all matters (legal,		
	technical, administrative) of the	LP.				
Implementation Officer:	René Coenen		·			

Activity No. 3

Title:	LONDON CONVENTION: FOLLOW UP ACTIVITIES TO THE 2007 ROPME							
	WORKSHOP ON THE LONDO	WORKSHOP ON THE LONDON CONVENTION AND PROTOCOL						
Duration:	5 Days	Dates:	09/02/2009 - 13/02/2009					
Region:	ARAB STATES/	Sub region:	ARAB COUNTRIES					
	MEDITERRANEAN							
Donor:	IMO-ITCP Fund	\$52,5	500					
Host Country:	Oman							
Subject Matter:	DUMPING OF WASTES AT SE	EA (LC)						
Discipline:	MARINE ENVIRONMENT PROTECTION							
Recipient Countries:								
Brief Description:	As a follow-up to the 2007 ROM	IPE workshop, w	vork towards identification and removal					
	of barriers to comply with the 19	96 Protocol lead	ing to subsequent accession by Oman.					
Inputs:			fees, travel and DSA) and IMO staff					
			nd administrative advice delivered via					
			d support by host country to cover the					
	1 1	1 \	expected. Provision of publications.					
Outputs:			and administrative matters of the 1996					
		ntion with the	expectation of subsequent ratification					
	of the 1996 Protocol.	of the 1996 Protocol.						
Implementation Officer:	Edward Kleverlaan							

Activity No. 4 (Completed)

Title:	GHANA – NATIONAL	WORKSHOP	ON	RATIFICATION	AND			
	IMPLEMENTATION OF THE I	<u>LONDON PROT</u>	OCOL					
Duration:	3 Days	Dates:	05/07/2	05/07/2008 - 07/07/2008				
Region:	AFRICA	Sub region:	WEST	& CENTRAL AFRIC	CA			
Donor:	IMO-ITCP Fund	\$30,0	000					
Host Country:	Ghana							
Subject Matter:	DUMPING OF WASTES AT SE	EA (LC)						
Discipline:	MARINE ENVIRONMENT PRO	MARINE ENVIRONMENT PROTECTION						
Recipient Countries:	Nigeria, Liberia, Sierra Leone, Gambia, Ghana, Guinea Bissau							
Brief Description:	Work towards identification of barriers to the ratification, implementation and							
	compliance with the 1996 Protoc	ol of the London	Convent	tion in the Region.				
Inputs:	One consultant travel (travel an	d DSA) and an	IMO Of	ficer (travel and DS	A), will			
	deliver a regional workshop to se							
	the Protocol. It is anticipated th							
	(no fees). The host country wi	ill be expected	to contril	bute in the form of	in-kind			
	support by meeting the cost of th							
	Further group training costs will				e for the			
	London Convention and Protoco	 Provision of p 	ublication	ns/course materials.				
Outputs:	Up to 20 participants trained	l in all matter	s (legal,	, technical, adminis	strative)			
	of the 1996 Protocol to the Lon	don Convention	, and lea	ding to possible rati	ification			
	of the 1996 Protocol.							
Implementation Officer:	Edward Kleverlaan							

Activity No. 5 (May be amended to National activity to accommodate Philippines request)

Title:	THAILAND – REGIONAL WORKSHOP ON RATIFICATION AND IMPLEMENTATION OF THE LONDON PROTOCOL (FOLLOW-UP TO DALIAN					
	WORKSHOP IN 2006)	20112 011 110	10002 (10220 1101 10 212211)			
Duration:	5 Days	, , , , , , , , , , , , , , , , , , ,				
Region:	ASIA & PACIFIC ISLANDS	Sub region:	EAST ASIA			
Donor:	IMO-ITCP Fund	\$62,4	190			
Host Country:	Thailand					
Subject Matter:	DUMPING OF WASTES AT SE	EA (LC)				
Discipline:	MARINE ENVIRONMENT PROTECTION					
Recipient Countries:	Vietnam Thailand, Philippines, S	Singapore, Malay	rsia, Cambodia, Indonesia, China			
Brief Description:	As a follow-up to the Dalian 2006 Workshop, work towards identification/removal of					
	barriers to compliance with the 1996 Protocol of the London Convention.					
Inputs:	One consultant travel (travel and DSA) and one IMO Officer (travel and DSA)					
			nis activity will be co-ordinated with			
	COBSEA and NOWPAP as appropriate.					
Outputs:	Up to 14 participants trained in legal, technical, administrative matters of the 1996 Protocol					
	to the London Convention, with the expectation of subsequent ratification of the 1996					
	Protocol.					
Implementation Officer:	Edward Kleverlaan					

Activity No. 6 (Under way)

Title:	DEVELOPMENT OF A GLOBAL INVENTORY OF SEA DUMPING ACTIVITIES IN THE PERIOD 2000-2005			
Duration:	3 months (in net terms)	Dates: 1/04/2008 – 31/03/2009		1/04/2008 - 31/03/2009
Region:	GLOBAL	Sub regi	on:	NA
Donors:	CANADA, ITALY, UNITED ST	TATES	\$35,0	000
Host Country:				
Subject Matter:	DUMPING OF WASTES AT SI	EA (LC)		
Discipline:	MARINE ENVIRONMENT PROTECTION			
Recipient Countries:	Global			
Brief Description:	Global inventory of dumping activities in the period 2000-2005 (State of Sea dumping report), to provide a better understanding of what is being dumped where – including (especially) outside of the LC/LP reporting system.			
Inputs:	Funds from donor countries, IMO project management and IMO Publications service.			
Outputs:	State of Sea dumping report.			
Implementation Officer:	Edward Kleverlaan			

Activity No. 7 (In preparation)

Title:	FIJI – REGIONAL WORKSHOP ON RATIFICATION AND IMPLEMENTATION OF THE LONDON PROTOCOL			
Duration:	3 Days	Dates:		11/03/2009 - 13/03/2009
Region:	ASIA AND PACIFIC ISLANDS	Sub regi	on:	PACIFIC
Donor:	AUSTRALIA		\$59,0	000
Host Country:	FIJI			
Subject Matter:	DUMPING OF WASTES AT SEA	(LC)		
Discipline:	MARINE ENVIRONMENT PRO	TECTION	1	
Recipient Countries:				of), Kiribati ,Marshall Islands, Niue,
	Nauru, Palau, Papua New Guinea, Solomon Islands, Tonga, Tuvalu, Vanuatu, Samoa			s, Tonga, Tuvalu, Vanuatu, Samoa
Brief Description:	Work towards identification/removal of barriers to compliance with the 1996 Protocol of			
	the London Convention.			
Inputs:	One consultant travel (travel and DSA) and one IMO Officer (travel and DSA)			
	and 14 participants, as well as publications. This activity will be co-ordinated with SPREP.			
Outputs:	Up to 14 participants trained in legal, technical, administrative matters of the 1996			
	Protocol to the London Convention, with the expectation of subsequent ratification of			
	the 1996 Protocol.			
Implementation Officer:	Edward Kleverlaan			

Activity No. 8

Title:	CÔTE D'IVOIRE – NATIONAL WORKSHOP ON RATIFICATION AND			
	IMPLEMENTATION OF THE LONDON PROTOCOL			
Duration:	5 Days	Dates:	07/06/2009 - 11/06/2009	
Region:	AFRICA	Sub region:	WEST & CENTRAL AFRICA	
Donor:	IMO-ITCP Fund	\$42,0	000	
Host Country:	Côte d'Ivoire			
Subject Matter:	DUMPING OF WASTES AT SE	EA (LC)		
Discipline:	MARINE ENVIRONMENT PRO	OTECTION		
Recipient Countries:	Côte d'Ivoire, Senegal, Gabon, D	Democratic Repu	blic of the Congo	
Brief Description:			he ratification, implementation and	
	compliance with the 1996 Proto	ocol of the Lond	don Convention in Côte d'Ivoire and	
		some of) the b	arriers thus identified with a view to	
	ratification of the 1996 Protocol.	col.		
Inputs:			IMO Officer (travel and DSA), will	
			cipating countries to the need to ratify	
	1		to obtain a consultant free of charge	
	,	1	to contribute in the form of in-kind	
	support by meeting the cost of the			
		ill be covered by additional funds from the Office for the		
		and Protocol. Provision of publications/course materials.		
Outputs:		to 20 participants trained in all matters (legal, technical, administrative		
	of the 1996 Protocol to the London Convention, and leading to possible ratification			
	of the 1996 Protocol.			
Implementation Officer:	Edward Kleverlaan			

B Proposed activities (as yet unfunded)

Activity No. 9 (Preferred dates accepted, funding under consideration)

Title:	NATIONAL WORKSHOP ON RATIFICATION AND IMPLEMENTATION OF THE LONDON PROTOCOL			
Duration:	3 Days	Dates:		February/March 2009
Region:	SOUTH AND	Sub reg	ion:	SOUTH AMERICA
	CENTRAL AMERICA			
Donor:				
Host Country:	PERU			
Subject Matter:	DUMPING OF WASTES AT SEA (LC)			
Discipline:	MARINE ENVIRONMENT PROTECTION			
Recipient Country:	Peru			
Brief Description:	Work towards ratification and implementation of the 1996 Protocol of the London			
	Convention.			
Inputs:				one IMO Officer (travel and DSA)
	and 20 participants, as well as publications. This activity will be co-ordinated with CPPS.			
Outputs:	Up to 20 participants trained in legal, technical, administrative matters of the 1996 Protocol			
	to the London Convention, with the expectation of subsequent ratification of the 1996 Protocol.			
Implementation Officer:	Edward Kleverlaan			

Activity No. 10 (Refer also to Activity No. 5)

Title:	NATIONAL WORKSHOP ON RATIFICATION AND IMPLEMENTATION OF THE LONDON PROTOCOL			
Duration:	3 Days	Dates:		
Region:	ASIA AND PACIFIC	Sub region	on:	ASIA
Donor:				
Host Country:	PHILIPPINES			
Subject Matter:	DUMPING OF WASTES AT SEA	A (LC)		
Discipline:	MARINE ENVIRONMENT PROTECTION			
Recipient Country:	Philippines			
Brief Description:	Work towards ratification and implementation of the 1996 Protocol of the London			
_	Convention.			
Inputs:	One consultant travel (travel and DSA) and one IMO Officer (travel and DSA)			
	and 20 participants, as well as publications.			
Outputs:	Up to 20 participants trained in legal, technical, administrative matters of the 1996 Protocol			
	to the London Convention, with the expectation of subsequent ratification of the 1996 Protocol.			
Implementation Officer:	Edward Kleverlaan			

Activity No. 11 (Refer also to Activity No. 5)

Title	IMPLEMENTATION OF THE 'BARRIERS TO COMPLIANCE' PROJECT IN			
	INDONESIA			
Duration:	9 Months	Time Line:	05/2009 - 02/2010	
Region:	ASIA	Sub region:	SOUTH-EAST ASIA	
Donor:	[SWEDEN]	[\$137	7,500]	
Host Country:	Indonesia			
Subject Matter:	Dumping of wastes at sea (LC)			
Discipline:	Marine Environment Protection			
Recipient Countries:	Indonesia as a pilot country in the	e region		
Brief Description:	Assisting Indonesia with accession to the London Protocol and identification of			
	barriers to compliance with the Protocol and subsequently the removal of (some of)			
	the barriers thus identified.			
Inputs:	Needs assessment mission by consultant(s) (fees, travel and DSA), and IMO Staff			
	(travel and DSA), followed by legal, technical and administrative advice, possible via			
	one of more focussed National W			
	In-kind support by host to cover the costs of participants at National Workshop(s).			
	Provision of publications/course materials.			
Outputs:	Up to 20-40 participants trained in all matters (legal, technical, administrative) of the			
	London Protocol and subsequent accession of the London Protocol.			
Implementation Officer:	Edward Kleverlaan			

Activity No. 12

Title:	DEVELOPMENT OF PUBLICATIONS TO ENHANCE COMMUNICATIONS AND AWARENESS OF THE PROJECT				
Duration:	3 Months				
Region:	GLOBAL	Sub region:	NA		
Donor:					
Host Country:					
Subject Matter:	DUMPING OF WASTES AT SEA (LC)				
Discipline:	MARINE ENVIRONMENT PROTECTION				
Recipient Countries:	Global				
Brief Description:	Develop and promulgate a comprehensive (marketing) package for potential donors,				
	pilot countries or recipient countries.				
Inputs:	Funds from donor countries, IMO project management and IMO Publications service.				
Outputs:	Marketing Package.				
Implementation Officer:	Edward Kleverlaan				

Activity No. 13

Title:	DEVELOP AND PROMULGATE A PUBLICATION OF THE GUIDANCE ON				
	NATIONAL IMPLEMENTATION OF THE PROTOCOL IN ALL UN				
	LANGUAGES				
Duration:	3 Months	Dates:	TBD		
Region:	GLOBAL	Sub region:	NA		
Donor:					
Host Country:					
Subject Matter:	DUMPING OF WASTES AT SEA (LC)				
Discipline:	MARINE ENVIRONMENT PROTECTION				
Recipient Countries:	Global				
Brief Description:	Develop and promulgate the <i>Guidance on National Implementation of LP</i> (including in				
	all UN languages) to be made av	ailable to recipie	ent countries.		

Inputs:	Donor country funds, IMO project Management and Publications Service.
Outputs:	Publication.
Implementation Officer:	Edward Kleverlaan

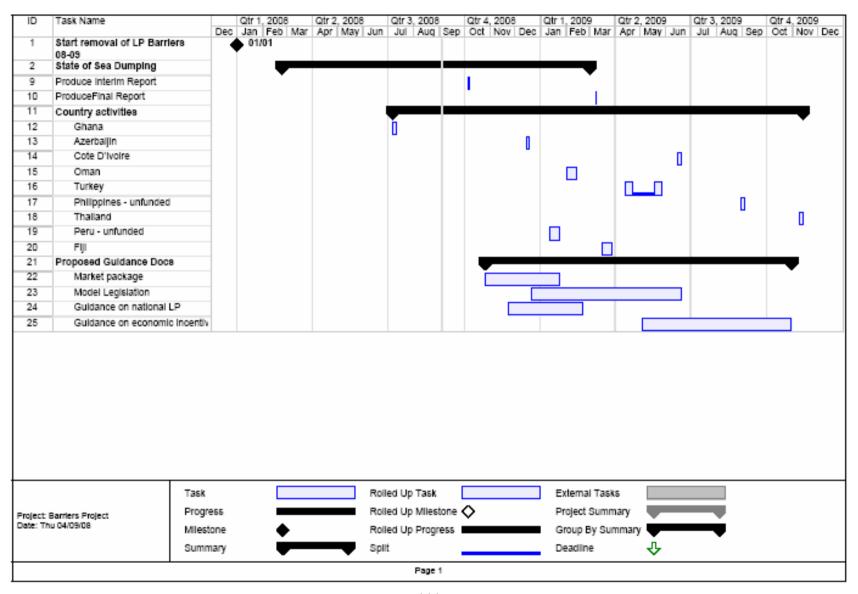
Activity No. 14

Title:	DEVELOP AND PROMULGATE MODEL NATIONAL LEGISLATION IN ALL UN LANGUAGES			
Duration:	3 Months	Dates:	TBD	
Region:	GLOBAL	Sub region:	NA	
Donor:				
Host Country:				
Subject Matter:	DUMPING OF WASTES AT SEA (LC)			
Discipline:	MARINE ENVIRONMENT PROTECTION			
Recipient Countries:	Global			
Brief Description:	Develop and promulgate model national legislation in all UN languages (possibly			
	different versions – e.g., catering for British, French and US style legal systems).			
Inputs:				
Outputs:		·		
Implementation Officer:	Edward Kleverlaan	·		

Activity No. 15

Title:	DEVELOP GUIDANCE AND SUPPORT PILOT COUNTRIES TO DEVELOP AND IMPLEMENT ECONOMIC INCENTIVES			
Duration:	3 Months	Dates:	TBD	
Region:	GLOBAL	Sub region:	NA	
Donor:				
Host Country:				
Subject Matter:	DUMPING OF WASTES AT SEA (LC)			
Discipline:	MARINE ENVIRONMENT PROTECTION			
Recipient Countries:	Global			
Brief Description:	Develop guidance and support pilot countries to develop and implement economic			
	incentives to encourage waste reduction practices and cost recovery mechanisms			
	(including 'user' and/or polluter pays systems, penalties for illegal dumping).			
Inputs:				
Outputs:				
Implementation Officer:	Edward Kleverlaan			

DRAFT GANTT CHART



ANNEX 10

GUIDANCE ON MANAGING SPOILT CARGOES

INTRODUCTION

- Occasionally during a voyage, cargo may spoil and mariners are faced with the need to manage the problem. These Guidelines on managing spoilt cargoes are intended for those individuals with the responsibility to take decisions for a given ship or cargo; they can be officers or the master (who would be trained mariners) or shoreside representatives such as agents or company officials (who may not be trained mariners).
- The ideal way to manage cargo that spoils during a voyage would be to offload it from the ship to be managed on land; either to sell for an alternate use, recycle salvageable materials, or be disposed of in an environmentally safe manner. Dumping spoilt cargo at sea should only be considered when: there is a marked degree of urgency, facilities on land are unavailable, and it will not cause harm to the environment or human health.

APPLICABILITY OF THE LONDON CONVENTION AND PROTOCOL (LC/LP) AND MARPOL ANNEX V TO THE MANAGEMENT OF SPOILT CARGOES

- The London Convention and Protocol regulate the dumping of wastes or other matter at sea. MARPOL Annex V regulates the prevention of pollution by garbage from ships.
- 4 MARPOL Annex V sets conditions for discharge of garbage from a ship. Under this Convention, wastes meeting the definition of "garbage" could be discharged at sea at least 12 nautical miles from land. Annex V under this Convention defines garbage as "all kinds of victual, domestic and operational waste excluding fresh fish and parts thereof, generated during the normal operation of the ship and liable to be disposed of continuously or periodically..."
- 5 The Guidelines for the Implementation of Annex V of MARPOL provide additional definitions which are useful in determining if spoilt cargoes can be classified as garbage under Annex V (as numbered in the Guidelines):
 - 1.7.7 "Operational wastes means all cargo-associated waste and maintenance-associated waste, and cargo residues defined as garbage in 1.7.10."
 - 1.7.5 "Cargo-associated waste means all materials which have become wastes as a result of use on board a ship for cargo stowage and handling ..."
 - 1.7.6 "Maintenance waste means materials collected by the engine department and the deck department while maintaining and operating the vessel, such as soot, machinery deposits, scraped paint, deck sweeping, wiping wastes, and rags, etc."
 - 1.7.10 "Cargo residues for the purposes of these Guidelines are defined as the remnants of any cargo material on board that cannot be placed in proper cargo holds (loading excess and spillage) or which remain in cargo holds and elsewhere after unloading procedures are completed (unloading residual and spillage). However, cargo residues are expected to be in small quantities."

- While determining whether a spoilt cargo meets the definition of "garbage" under Annex V is done on a case-by-case basis, it is unlikely that most spoilt cargo will meet this definition of "garbage".
- Unless a spoilt cargo meets the above definitions covering "garbage" under Annex V, it will be subject to the control of dumping under the London Convention and Protocol. The London Convention and Protocol regulate ocean dumping of wastes or other matter. They set out a system requiring a permit be obtained in advance of dumping. Thus, a permit needs to be obtained from either the State in whose jurisdiction the dumping would occur, or from the flag State if the dumping is planned for waters outside of national jurisdiction. Only those materials found to be acceptable under the London Convention or Protocol may be considered for dumping at sea.

CONTINGENCY PLANS FOR THE MANAGEMENT OF SPOILT CARGO

- 8 The shipowner or their representative may consider developing contingency plans to facilitate timely decision-making by regulatory authorities in the port State or flag State and minimize delays to a ship.
- It would be useful for ships, especially those carrying the same cargo type over time, to have contingency plans established for dealing with their specific type of cargo should it spoil. Ships engaged in spot contract services could have general contingency plans in the event of cargo spoilage. Contingency plans should consider:
 - .1 an assessment of the potential for cargo spoilage to occur over a given route, including the risks, potential quantities and measures available to reduce spoilage;
 - .2 notifying the cargo owner, port authorities and regulatory authorities of the port State or the ship's flag State;
 - a process to decide if the spoilt cargo is to be managed as waste for disposal on land or sold for an alternative use;
 - a process to determine available land-based facilities that are authorized to receive the spoilt cargo, and make arrangements;
 - .5 if land-based options are not available, or practicable, a communications process setting out who will be contacted for a permit for dumping at sea; and
 - .6 if dumping is selected, a process and the information needed to obtain a permit.

CONSIDERATIONS FOR DOCUMENTING SPOILT CARGO

10 Existing documents that ships carry can provide much of the information needed for managing spoilt cargo. Key documents include bills of lading, cargo manifests, ship's logs, and the Garbage Record Book under regulation 9 of Annex V.

- In rare cases where spoilt cargoes could be defined as "garbage' under Annex V, discharges of spoilt cargo should be recorded in the Garbage Record Book. Spoilt cargo should also be recorded in the Garbage Record Book if it is offloaded in port for management on land as ships' wastes.
- Otherwise, documentation should include information necessary to obtain a dumping permit under the London Convention or Protocol, including descriptions of:
 - .1 the quantities and properties of the waste or other matter;
 - .2 how the cargo was spoiled;
 - .3 how the spoilt cargo is packaged and how it would be released;
 - .4 the proposed dumping site including geographical position (latitude and longitude), depth of water and distance from nearest coast; and
 - .5 the potential effects and expected environmental consequences of the disposal of the spoilt cargo.
- The master or ship's owner should consult with the cargo owner to ensure information on the nature of the cargo is complete. A local shipping agent may be able to obtain advice on selecting a suitable dumpsite. Dumpsite selection is part of the permitting process and, therefore, it is necessary to consult the Government issuing the permit on the selection of a suitable dumpsite.

APPLYING FOR A PERMIT

- The London Convention requires consideration of the practical availability of alternative land-based methods of treating, disposal or elimination. The London Protocol states that ocean dumping permits shall be refused if the permitting authority determines that appropriate opportunities exist to re-use, recycle or treat the waste without undue risk to human health or the environment or disproportionate costs. Therefore, options to manage spoilt cargo other than ocean dumping need to be considered. Such options may include resale for alternate use, recycling, landfill, secure landfill, incineration, composting and treatment for use or landfill.
- The ship's owner, master, or a designated officer in consultation with the owner of the cargo should prepare the permit application. The owner of the cargo may prefer to apply for the permit. It should be submitted to the Government of the State in whose jurisdiction the dumping is planned to occur. Contacts for the appropriate State Government can be obtained from the Office for the London Convention and Protocol at the International Maritime Organization (IMO) at rcoenen@imo.org. If the dumping is planned to take place in waters outside of national jurisdiction, the permit application should be submitted to the flag State Administration.

EMERGENCY PERMITS

In emergencies posing an unacceptable threat to human health, safety or the marine environment and admitting no other feasible solution, an emergency permit may be issued. Disposal at sea under an emergency permit would need to be conducted in a manner that minimizes the impact on the marine environment.

MEASURES FOR TEMPORARY STORAGE

- A disposal at sea permit requires a detailed assessment of the waste and other requirements and can take a significant amount of time to obtain. Contingency measures should be in place to temporarily allow for storage of the material to be disposed of while a permit is obtained, allowing the transporting vessel to proceed with its normal activities.
- Another aspect to consider, if disposal at sea is the preferred option to manage a spoilt cargo, is that the configuration of the ship where the cargo spoiled may not be amenable to dumping it at sea. In such a case, contingency plans could consider arrangements for temporary storage either on land or another vessel, and subsequent loading onto suitable equipment for dumping.
- 19 Plans for temporary storage would need to be considered in any permit application review and should include location, logistics for transportation and handling, expected time frames, containment measures, emergency response (if needed), and contingencies.

MITIGATION FOR INVASIVE SPECIES AND PATHOGENS IN SOME SPOILT CARGOES

- Some spoilt cargoes pose concerns for transferring invasive species or harmful pathogens, potentially from living organisms present in the cargo, or transported as the cargo. Invasive species of concern could be terrestrial species potentially transferred from port to port or marine species introduced through contamination of the cargo with sea water, a concern if the material is dumped at sea. Measures may include special considerations for disposal or storage site selection, containment if storage is required, and containment at the disposal site including capping or other confined disposal. Treatment could also be considered depending on facilities and type of organism suspected, but could include comminution or incineration.
- Mariners engaged in the transport of cargo that presents risks for transferring invasive species should include measures in their management plans to manage spoilt cargo. Advice may be available from regulatory authorities in the importing country.
- Mortalities of live animal cargoes such as certain shellfish and livestock can be a key concern, notably for countries that rely on maritime shipping for trading livestock. In case of livestock, advice of the Food and Agriculture Organization is that livestock mortalities should be stored for landing ashore and incineration. Onboard storage of mortalities should be segregated to prevent pathogen transmission among the other animals on board.
- Managing risks of disease transmission on land may also need some specific considerations. In some cases, land-based disposal options may present a higher risk to human health and the environment. The comparative risks between land disposal and sea disposal should be assessed as related to the specific circumstances and potential impacts posed to human health and the environment. Local regulatory authorities in the port State receiving the mortalities should be contacted for advice. Shipping agents, prior to arrival, should facilitate contact with the port State.
- Other measures may include mechanical handling to avoid worker exposure (seafarers and dockside workers), site selection considerations (avoiding potential conflicts with other users of the sea), containment if storage is required, and containment on site including capping or other confined disposal. If the pathogen is known, measures may be set for monitoring worker health (for human health risks) or for monitoring the local environment (if the

material presents a risk to wildlife). Treatment could also be considered depending on the facilities and type of organism suspected.

ALTERNATIVE OPTIONS WHEN DUMPING AT SEA IS NOT ALLOWED

- Even in cases where practical or appropriate land-based options are not available, dumping at sea may not be allowed based on the type of spoilt cargo or a sensitivity of the receiving environment.
- Where a dumping permit would not be allowed for a type of spoilt cargo, plans should be made for offloading in port. If there are no available facilities at a given port, as part of the contingency planning process, ports and local authorities should be consulted either on:
 - .1 the potential to establish facilities;
 - .2 options for the potential spoilt cargo to be used in local industry; or
 - .3 feasibility of transport to an authorized facility within the jurisdiction.
- If no facilities are available within a port State, contingency plans should consider retention of the spoilt cargo on board and sailing to either the nearest port with facilities for offloading either on a direct route or on the planned route for other cargo shipments. To manage costs, these plans should be developed in consultation with insurance organizations and cargo owners.

ANNEX 11

GUIDANCE ON BEST MANAGEMENT PRACTICES FOR REMOVAL OF ANTI-FOULING COATINGS FROM SHIPS, INCLUDING TBT HULL PAINTS

1 BACKGROUND AND INTRODUCTION

- 1.1 Anti-fouling systems are used on ships' hulls to limit the effect fouling can have on drag, fuel consumption, and the emission of combustion products. They may contain pesticides or be pesticide-free. The pesticides tributyltin (TBT) and copper are the most common anti-fouling biocides, although the shipping industry is moving away from TBT systems. The most effective biocidal anti-fouling systems are formulated as self-polishing polymer coatings that wear away as the ship is propelled through the water, to expose a fresh layer of biocide. Biocides that leach into water from ship hulls may adversely affect non-target organisms. Anti-fouling coating removal activities can be another major source for the release of TBT to the environment. The choice of anti-fouling system, methods of hull cleaning, and collection, treatment, and disposal of spent coatings have an impact on the release of biocides into the environment, and may result in high concentrations of biocides in the marine sediments in areas close to where application and The adoption of sound management practices for the removal activities are conducted. application and removal of anti-fouling systems can reduce the release of biocides into the natural environment.
- 1.2 By their nature, all anti-fouling biocides are toxic and can affect a broad range of organisms beyond those that cause fouling. TBT causes reproductive anomalies and population effects in certain species of marine snails at concentrations in the parts-per-trillion range, and has been implicated in endocrine effects on other organisms. Oysters exposed to low levels of TBT can develop shell deformities that reduce their value as seafood. TBT is associated with immune suppression and other adverse effects in other marine species, is slow to degrade, and is very persistent in sediments, where many affected species live and feed.
- 1.3 The International Convention on the Control of Harmful Anti-Fouling Systems on Ships (AFS convention), which entered into force on 17 September 2008, prohibits the use of organotin biocides in anti-fouling paints used on ships. As a consequence, ships will have to either replace or overcoat their existing organotin based anti-fouling systems. If the large amount of TBT-containing waste that is expected to be generated at shipyards and other facilities as owner/operators attempt to achieve compliance is not properly managed, it will adversely affect the quality of bottom sediments in nearby waters. Future amendments to the Convention could result in requirements for removal of other anti-fouling paints from vessel hulls, and methods to control organotin-based waste are largely transferable to other anti-fouling wastes.
- 1.4 As stated in Annex 2, paragraph 4, of the London Protocol, for dredged material, the goal of waste management should be to identify and control the sources of contamination. This should be achieved through implementation of waste prevention strategies, and requires collaboration between the relevant local and national agencies involved with the control of point and non-point sources of pollution.
- 1.5 For these reasons, in 2006, the Scientific Groups established under the London Convention and Protocol began to develop guidance on Best Management Practices (BMPs) for removal of anti-fouling coatings from ships. The Scientific Groups discussed an initial report of BMPs in June 2007 (LC/SG 30/8 and LC/SG 30/14).

- 1.6 In November 2007, the governing bodies under the London Convention and Protocol noted that this issue had now become very urgent as the AFS Convention would enter into force on 17 September 2008. MEPC 57 was informed, by way of interim advice, of the information collected in the Scientific Groups on environmentally-sound removal methods of anti-fouling systems from ships, resulting in document MEPC 57/INF.2. In May 2008, the Scientific Groups continued their work, as planned, and prepared a "work in progress" report (LC/SG 31/16, annex 11) which was submitted as document MEPC 58/INF.3 and which was, subsequently, adopted by the governing bodies in October 2008.
- 1.7 Whilst recognizing the limited mandate of the London Convention and Protocol with respect to the control of sources of pollution to and activities occurring within internal waters, these BMPs are hereby offered as a tool in the handling and management of AFS substances.
- 1.8 Recommended further reading and references are set out at the end of this document.

2 GENERAL OVERVIEW

- 2.1 BMPs generally include two methods:
 - .1 **source-control methods** (e.g., vessel shrouding, sweeping, covering waste piles, and bermed storage for wastes and paints); and
 - .2 **collection, filtration and treatment methods** (e.g., hull wash water settling tanks and filters). These BMPs depend on some basic requirements for different types of ship building and maintenance facilities.
- 2.2 Activities in which AFS waste may be generated include:
 - .1 **hull cleaning**, whereby the hull surface is scrubbed or scraped to remove the accumulated growth of fouling organisms. Some degree of fouling is expected even when a functional AFS is present, and some operators view hull cleaning between applications of AFS as necessary to ship operations; and
 - .2 **AFS coating removal**, in which hull coating layers are removed in preparation for application of a new coating.

AFS waste may also be generated during application of hull coatings, but this process is not discussed here.

- 2.3 Types of waste associated with removal of TBT hull coatings include:
 - surface cleanings to remove fouling organisms which have the potential to remove TBT paint along with the organisms themselves;
 - .2 paint chips and other paint remnants, either dry from scraping, sanding etc.; or in washwater, water used in wet blasting;
 - .3 dissolved TBT and degradation products, in washwater and water used in wet blasting;

- .4 contaminated sand or grit used in blasting; and
- .5 TBT removed from waste materials by physical means, such as filtration or water treatment.
- 2.4 Waste materials should be the same or similar as described above for other anti-fouling biocides.
- 2.5 This guidance document provides information on methods of hull cleaning and AFS removal techniques. Environmentally-protective steps for hull cleaning and AFS removal waste chains are described. A bibliography of recommended sources for BMPs and related information is included.

3 BASIC FACILITY REQUIREMENTS¹

- 3.1 All facilities in which hulls are cleaned or AFS coatings removed should follow **good housekeeping practices**, such as thorough record-keeping, securing of materials and equipment, and instruction of workers on good work habits and hygiene. Everyday hull maintenance activities should be conducted in a manner that is safe and keeps pollutants out of surface waters, ground waters, and the air.
- 3.2 Whatever the type of a facility, management is responsible for establishing a **clear framework** for safe operation and assigning responsibilities in support of sound environmental and safety practices. Management should communicate a clear **code of practice** to all personnel. This code of practice should include a description of emergency procedures in response to mishandling or release of waste materials through human error, flooding, fire, and other circumstances. The best practices for emergency response will vary based on facility and the specific circumstances of the event, and are not explicitly addressed in this document.
- 3.3 Facilities in which hulls are cleaned and AFS coatings removed are widely variable in their level of technological sophistication. Locations not specifically designed or equipped for ship maintenance and repair work may be temporarily established to handle smaller work loads. Other facilities that handle larger volumes of work may be better equipped and may include structures (e.g., dry docks) and trained staff dedicated to hull-cleaning activities. Everything in between is possible, and special attention should be given to best management practices adaptable to less-well-equipped facilities.
- 3.4 **Facility design**: At a minimum, all facilities should have an impermeable floor or work surface for dry paint removal (e.g., scraping, grit blasting), with a water collection and containment system for waste water generated during AFS removal or hull cleaning (as may be found in dry docks). The floor should be clean at the start of work and should be thoroughly cleaned after completion of the work. If an impermeable floor is not present, a temporary impermeable surface (e.g., a waterproof tarp) should be installed that guarantees containment of waste materials and safe collection of waste water. Other necessary environmental and safety provisions shall be undertaken before the work starts, including installation of marked waste containers and the use of personal protective equipment. In addition, a suitable air cleaning system is recommended covering removal of AFS and recovery of dust, waste materials, and

The term "Facilities" is defined as shipyards, dry docks, boatyards, vessel construction or renovation yards, ports, harbours, marinas or other related locations where AFS might be removed.

sandblasting debris from the air. Details on the design and the construction of impermeable floors and other features can be found in the recommended further reading and references (see below).

- 3.5 **Facility staff**: The facility should have designated staff with responsibility for hull-coating waste and waste water management.
- 3.6 Collection of particulate waste and its handling at the facility: Different types of particulate waste from AFS removal and other operations should be stored separately while awaiting treatment and disposal. Storage containers should be clearly marked. Contents of the waste containers should be removed for treatment and/or disposal at an appropriate waste management facility.
- 3.7 **Safe waste water collection**: Water contaminated with hull coating waste should be held separately from other liquid materials in storage at the facility until it can be treated. Waste water should be collected in a closed holding tank or container. Waste water contaminated with an AFS during hull coating removal should be left standing so that suspended particles can settle and be physically separated from the water. The supernatant wastewater collected at the AFS removal site should be treated and discharged under an appropriate permit to prevent the introduction of chemical contaminants or invasive species from fouling organisms that may be present in the waste water.
- 3.8 **Handling of waste water**: The settled suspended particles should be separated from the supernatant water and transported to a licensed facility for treatment and disposal. Since methods are available for removing organotins dissolved in waste water, such waste water should be treated to remove dissolved components of the anti-fouling coating.
- 3.9 **Discharge water requirements**: The amount of water to be discharged at a certain date should be reported to relevant authorities. A certain particle load a general rule might be 100 mg/l shall not be exceeded for discharged water (see Ten Hallers-Tjabbes 2007). The pH of discharged water shall be within certain limits (e.g., between 6.5 and 9 pH units). Discharges of this AFS contaminated material into sensitive marine areas should be avoided².

4 GENERAL METHODS FOR HULL CLEANING

4.1 Hull cleaning is intended to remove accumulated fouling growth while keeping the underlying anti-fouling coating mostly intact and operational. Hull cleaning is likely to remove some amount of anti-fouling coating along with the fouling organisms. There are principally two ways of hull cleaning: in water and on land.

_

Point source discharges of wastewater to water bodies or the wastewater collection system may be subject to a pre-treatment program and/or a wastewater discharge permit issued by the country's environmental regulatory agency or state/province. For example, in the United States a National Pollutant Discharge Elimination System (NPDES) permit may be issued under Section 402 of the US Clean Water Act by one of the US States or territories that have specific discharge limits and requirements (http://cfpub.epa.gov/npdes/). Effluent limits, monitoring requirements, and reporting requirements would be included in an NPDES permit. Some US States have waste discharge requirements that may be applied to discharges from AFS facilities. If the wastewater is considered as an industrial discharge, the waste stream may be subject to pre-treatment requirements (http://cfpub.epa.gov/npdes/home.cfm?program id=14).

- 4.2 The practice of cleaning vessels' hulls bearing biocidal AFS coatings in water poses risks to the environment since containing the wastes (both the fouling material itself and any incidentally removed AFS) is impossible. **The method of in-water hull cleaning is therefore not recommended.** Cleaning should only be done using personal protective equipment. A soft brush should be adequate to remove fouling in the early stages, and is less likely than a stiff brush to release paint waste into the water.
- 4.3 The hull cleaning on land shall follow the basic facility requirements as outlined in section 5, below.

5 REMOVAL OF ANTI-FOULING SYSTEMS ON LAND

- 5.1 There are principally three methods for the removal of anti-fouling systems:
 - .1 **scraping**: sanding, grinding, or scraping by hand or equipment to scrape off the paint;
 - .2 **blasting**: grit blasting (dry blasting, wet blasting); and
 - .3 water blasting/washing (low, medium and high pressure).
- Requirements for removal of AFS: As with all facilities for hull cleaning and coating removal, basic requirements for the facility are an impermeable floor or work surface and a means for capturing and containing AFS waste, fouling materials, dust, and, if water is used for removal, water contaminated with waste. As noted in section 3.4 above, the floor or work surface should be clean at the start of the operation. Structures and materials within the work space that are not needed during blasting should be removed from the work area. Persons involved in the removal of AFS coatings should wear personal protective equipment (such as, fluid impermeable gloves, face mask, safety glasses, protective suit; respiratory protection is advisable if waste material is likely to become airborne). Due to the use of high pressure air or water involved and the potential spread of paint over considerable areas, grit blasting is only recommended for an enclosed area or in a dry dock with features allowing the collection of aerosol particles, solids and liquids containing AFS coating residue, including an impermeable work surface and containment system.
- 5.3 **Preparatory assessment and action for removal of AFS**: If possible, prior to starting the anti-fouling coating removal operation, the facility shall ascertain the type of AFS on the hull. This information may be available on the ship's documentation as required by the AFS treaty. When the type of AFS is known, appropriate measures can be taken during removal, handling, treatment, and disposal. For example, waste from a non-biocidal coating may be disposed of differently than waste from a biocidal coating. Chemical treatment of waste materials may differ depending on the nature of the biocide.
- 5.4 AFS can be removed by sanding or grinding the material off the hull. Because these operations are performed with hand tools, the worker is likely to be exposed to dry waste, either in the air or on the skin. Precautions should be taken to reduce worker (and bystander) exposure, such as the use of protective equipment (dust mask, goggles, gloves) and not conducting paint removal on windy days.

- 5.5 Grit blasting is the most common practice for AFS removal. Abrasive materials used in grit blasting vary; materials can include steel, blasting grit, copper cinder, corundum, aluminium, and glass beads. Some rules-of-thumb for media selection in grit blasting are:
 - .1 choose the least aggressive media (in terms of mechanical and chemical characteristics); this will result in less wear and lower equipment maintenance expense;
 - .2 use the smallest media particle size, which is more effective as more impacts per second will yield a faster process; and
 - .3 find the lowest blast pressure that is effective in removing the coating; doing so will yield energy savings in reduced compressed air requirements, as well as less wear and lower maintenance costs.
- Operation and waste collection by grit blasting: Airborne particles from dry blasting can be contained by working in a cabin with an air filtering system, by fine-mesh netting around the facility or by a water screen that catches the particles and allows them to settle on the work floor. These measures are not expected by themselves to reduce inhalation exposure for workers. Measures should be taken to protect workers from grit and particle respiration. Grit blasting accomplished with the use of water should only be undertaken in a facility that has a system to catch and remove air-borne particles and waste water.

6 THE ANTI-FOULING WASTE CHAIN

- 6.1 AFS may contain toxic material that should be prevented from entering the environment as waste. Steps should be taken to limit exposures for workers and others. A preventive approach in AFS waste collection is advocated. For example, only necessary personnel should be in the area where AFS removal is taking place, and outdoor jobs should not be conducted on a windy day.
- 6.2 **AFS waste collection**: Different types of waste should be kept in separate containers only intended for that specific type of waste. After completion of the work, the waste containers should be removed for further waste treatment at a specialized facility. Waste should not be removed by washing with water or brushing it into the environment; the waste should also never be buried, incinerated or permanently stored at the facility.
- 6.3 **AFS waste water collection**: Water contaminated with hull coating waste should be held separately from other liquid materials in storage at the facility until it can be treated. Waste water should be collected in a closed holding tank or container. Waste water contaminated with an AFS during hull coating removal should be left standing so that suspended particles can settle and be physically separated from the water. The supernatant wastewater collected at the AFS removal site should be treated and discharged under an appropriate permit to prevent the introduction of chemical contaminants or invasive species from fouling organisms that may be present in the waste water.
- 6.4 **Collection of particulate waste and its handling at the facility**: Dry waste is produced by scraping, grinding, and sanding, or by grit blasting. Grit can be reused multiple times. Both spent grit and particulates such as paint chips must be collected and removed from the area after work is completed or daily if the work spans several days.

- 6.5 **AFS waste water handling and treatment**: The waste water collected should be subjected to a system to remove the contaminated waste so as to meet a predefined Total Suspended Solid (TSS) content in the waste water (see paragraph 3.9 above). Treated waste water meeting predefined standards may be disposed of through a sanitary sewer system; if so, local sewer authorities should be advised beforehand. The contaminated sediment, having been separated from the waste water should be transported to a licensed facility for treatment or safe disposal. In absence of a licensing system for disposal systems, contaminated sediment should be directed to a landfill lined with an impermeable liner to prevent leaching of waste materials into ground or surface water.
- 6.6 **AFS waste chain for grit blasting**: Contaminated grit may be re-used after sieving of the broken grit particles and it may be recycled for other purposes or cleaned using thermal cleaning. Separated grit dust and/or contaminated grit that are unfit for re-use or recycling should be disposed of at a licensed facility that is protected from the environment. If the facility is not able to recycle or clean the grit, the contaminated grit and/or sieving waste should be removed and transferred to a facility licensed to clean blasting grit.
- 6.7 **Grit blasting waste handling**: Waste water from wet grit blasting should be caught, removed and contained. The grit that remains on the floor should be collected and removed for reuse, recycling, cleaning or safe disposal. Contaminated grit, if not to be reused, or any waste separated from contaminated grit, should be transported to a licensed facility for treatment or safe disposal. In absence of a licensing system for disposal systems, contaminated grit should be directed to a landfill lined with an impermeable liner to prevent leaching of waste materials into ground or surface water.

7 RECOMMENDED FURTHER READING AND REFERENCES

Best Management Practices (BMPs)

- ANZECC Marine Accidents and Pollution Implementation Group (2000) Code of practice for antifouling and in-water hull cleaning and maintenance, 12 pp.
- Auckland Regional Council (2005). Auckland guideline for the management of environmental risks from boat maintenance activities. 34-52.
- British Maritime Federation (2005). Environmental Code of Practice, 84 pp.
- Connor, J. and Drociak, J. (2001). Best Management Practices for New Hampshire Marinas. New Hampshire Department of Environmental Services, Concord, NH, 79 pp.
- Environmental Alliance Environment Agency (UK), Scottish Environment Protection Agency, Environment and Heritage Service (Wales) (2004). Pollution Prevention Guidelines Marinas and Craft PPG14, 8 pp.
- Environment Canada (1995). Best Management Practices (BMPs) for Marinas and small Boatyards in British Columbia. Report by PCA Consultants Ltd., Richmond, BC, 18 pp (www.pyr.ec.gc.ca/boatyards).
- Environmental Protection Agency EPA (2005). Shipyard Stormwater Best Management Practice #3: Removal of Hull Biofoulants, 5 pp.

- Environmental Protection Authority (2004). Stormwater Management for Marinas, Boat Sheds and Slipways. Report of EPA for the Government of Southern Australia, 4 pp.
- Regional Council (2003). Stormwater Management Devices: Design guidelines manual. Technical Publication No.10.
- ten Hallers-Tjabbes, C.C. (2007). Environmental sound and safe removal of harmful anti-fouling systems and of cleaning of ships' hulls. SAFEMED Project Task 3.8 O Final report. IMO/EC, 98 pp.

Other sources

- Champ, M.A., Fox, T. and Mearns, A.J. (1999). Treatment of regulated discharges from shipyards and dry-docks. Proceedings of the special session held at Oceans '99, Seattle, Washington, Sept 13-16, 1999. Marine Technology Society, Washington, DC, 230 pp.
- Champ, M.A. (2000). A review of organotin regulatory strategies, pending actions, related costs and benefits. The Science of the Total Environment 258, 21-71.
- Stichnothe, H., Thoeming, J and Calmano, W. (2001). Detoxification of tributyltin contaminated sediments by an electrochemical process. The Science of the Total Environment 266, 265-271.
- TBT Clean (2005). Life02 ENV/B/000341 Screening of technologies 08/04/2003. Report for Life by Port of Antwerp, APEC, DEC, Envisan and ERC, 60 pp.
- Tam, N.F.Y., Chong, A. and Wong, Y.S (2002). Removal of tributyltin (TBT) by live and dead microalgae cells. Mar. Poll. Bull. 45, 362-371.
- Tam, N.F.Y., Chong, A. and Wong, Y.S (2003). Removal of tributyltin (TBT) from wastewater by microalgae. Water Pollution VII, 261-273.

Recommended document downloads

ANZECC BMPs 2000

http://www.environment.gov.au/coasts/pollution/antifouling/code/pubs/code.pdf

TBT-Clean Screening Report – Port of Antwerp –2003 – various reports to download http://www.portofantwerp.be/tbtclean/index.html

Best Management Practices (BMPs) for Hull Maintenance at Boatyards and Marinas – several BMPs, Canada and United States

http://www.pyr.ec.gc.ca/boatyards/index e.htm

ANNEX 12

LIST OF RECENT AND PLANNED PUBLICATIONS TO RAISE THE AWARENESS OF THE LONDON CONVENTION AND PROTOCOL AND THEIR ACHIEVEMENTS

Introduction

- To increase the awareness of the London Convention and its Protocol (LC/LP) and to assist in administrative and technical matters, the Secretariat has endeavoured to increase the number of published documents produced under the LC/LP. While a number of documents have been published recently and can be purchased from the IMO Publications Section, this document sets out a short-list of planned publications.
- 2 As a recapitulation, the currently available publications are shown in paragraph 3 below.

RECENT PUBLICATIONS

- 3 The following documents were published recently:
 - "Guidelines on the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972 2006 Edition". This publication is a compilation of all the 'Waste Assessment Guidelines' adopted by the Consultative Meetings since 1997 and is available in the English (I531E), French (I531F) and Spanish languages (I531S). This publication includes the guidance on *de minimis* concept and the national guidance on implementing the Protocol. The guidance material can also be viewed on the LC-website under <u>Waste Assessment Guidelines</u> in all three languages. These volumes can be purchased from the IMO Publications Section.
 - A second publication, namely the "Guidelines for the Sampling and Analysis of Dredged Material intended for Sea Disposal", completed in 2003, is now also available in the French (I537F) and Spanish languages (I537S), as well as in English (I537E), and can be purchased from the IMO Publications Section.
 - A new brochure entitled: "The London Convention and Protocol: Their role and contribution to protection of the marine environment" was completed in early 2008 in the English, French and Spanish languages. This brochure aims to inform potential members to the LC/LP about what the LC/LP actually are, their achievements and benefits. It supersedes an earlier version, published in the same languages in 1997. They can be downloaded from the London Convention website and will be made available at forthcoming meetings of the governing bodies and Scientific Groups.

PLANNED PUBLICATIONS

- 4 The following publications are expected to be issued following their finalization:
 - .1 The "LC/LP-UNEP *Guidelines for the Placement of Artificial Reefs*" are planned to be published, in the English, French and Spanish languages in early 2009, and in close co-operation with UNEP.

- .2 The "Guidance for the Development of Action Lists and Action Levels for Dredged Material" is planned to be published, in the English, French and Spanish languages in the first half of 2009.
- Other guidance documents approved at this session, namely the "Revised Specific Guidelines for the Assessment of Inert, Inorganic Geological Material" or under review (e.g., the "bulky wastes guidelines"), will require an update of the 2006 edition of the publication listed under paragraph 3.1 above. It is envisaged that this would occur in early 2010.
- .4 The results of the Barriers to Compliance (B2C) Project "The State of Sea Dumping" Report, (2000-2005) is expected to be published at the end of 2009. As part of this B2C Project, it is envisaged that a LC/LP 'How to do it Manual' will be developed in the twelve months thereafter and published in the course of 2010. Additionally, and if Parties require this, an overview of current national laws implementing LP could be developed and published. These could serve as models for other jurisdictions contemplating joining the Protocol.
- .5 Since the Secretariat is running out of stock of the current 2003 edition of the official texts of both the London Convention and Protocol, and noting the 2006 amendments to the London Protocol, a new version of this basic document will be considered for publication at the end of 2009. The updated texts would be published in the English, French and Spanish languages.
- .6 Finally, the outline for an LC/LP publication on CO₂ sequestration in sub-seabed geological formations, as shown below, was approved by the governing bodies and this publication would be planned in the course of 2010.

APPROVED OUTLINE FOR AN LC/LP PUBLICATION ON CO₂ SEQUESTRATION IN SUB-SEABED GEOLOGICAL FORMATIONS

- 5 The outline of an LC/LP publication on CO₂ sequestration in sub-seabed geological formations is as follows:
 - .1 Introduction and background of LP's involvement with CO₂ sequestration
 - .2 Full text of the 2006 amendment to Annex 1 to the London Protocol
 - .3 Full text of the CO₂ Sequestration Guidelines (2007)
 - .4 Full text of the CO₂ Risk Assessment and Management Framework (2006)
 - .5 Outcome of additional advice on transboundary CO₂ sequestration issues (2009)
 - .6 Updated FAQ on CO₂ Sequestration in Sub-seabed Geological Formations
 - .7 Recommended literature and URLs

ANNEX 13

LIST OF SUBSTANTIVE ITEMS AGREED FOR INCLUSION IN THE AGENDA FOR THE 31ST CONSULTATIVE MEETING AND 4TH MEETING OF CONTRACTING PARTIES

- 1 Consideration of the report of the Scientific Groups
 - Waste assessment guidance
 - Monitoring and assessment
 - CO₂ sequestration in sub-seabed geological formations
 - Technical co-operation
 - Ocean fertilization
 - Co-operation with the Compliance Group
 - Habitat modification/enhancement
 - Dumping reports
 - Coastal management and prevention of marine pollution
 - Review of the Joint Work Programme
- 2 Compliance issues
 - Report of the Compliance Group
 - Reporting and findings of correspondence group on reporting
 - Strategies to improve reporting, including the dumping database
 - Compliance monitoring
- 3 Monitoring for the purposes of the London Convention and Protocol
 - Co-operation with assessments by other organizations (e.g., the UN Regular Process)
- 4 Technical co-operation and assistance
 - Long-term TC strategy and the implementation thereof
 - Waste Assessment Guidance Tutorial
 - Removal of barriers to compliance
 - Results of workshops
 - Concrete technical advice, projects and activities
- 5 Ocean fertilization
- 6 CO₂ sequestration in sub-seabed geological formations
 - Experiences with CO₂ sequestration projects
 - CO₂ sequestration in transboundary sub-seabed geological formations
- 7 Interpretation of the London Convention and Protocol
 - Collaboration with MEPC on "boundary" issues

- 8 Matters related to the management of radioactive wastes
- Outreach to prospective new Contracting Parties and relations with other organizations in the field of marine environmental protection
 - New communication materials
 - Reports from Contracting Parties, IGOs, NGOs, and the Bureau
 - Reports on activities related to the London Convention and Protocol
 - UNEP-GPA, UNEP Regional Seas Programme, IOI, IOC, FAO
- 10 Administrative arrangements and future work