

1978 PROTOCOL RELATING TO THE 1973 INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS (INCLUDING ANNEXES, FINAL ACT AND 1973 INTERNATIONAL CONVENTION)

Adopted in London, United Kingdom on 17 February 1978

1978 PROTOCOL RELATING TO THE 1973 INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS (INCLUDING ANNEXES, FINAL ACT AND 1973 INTERNATIONAL CONVENTION)	2
ARTICLE I GENERAL OBLIGATIONS	2
ARTICLE II IMPLEMENTATION OF ANNEX II OF THE CONVENTION	3
ARTICLE III COMMUNICATION OF INFORMATION	3
ARTICLE IV SIGNATURE, RATIFICATION, ACCEPTANCE, APPROVAL AND ACCESSION	3
ARTICLE V ENTRY INTO FORCE	3
ARTICLE VI AMENDMENTS	4
ARTICLE VII DENUNCIATION	4
ARTICLE VIII DEPOSITARY	4
ARTICLE IX LANGUAGES	5
ANNEX MODIFICATIONS AND ADDITIONS TO THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973.....	6
FINAL ACT OF THE INTERNATIONAL CONFERENCE ON TANKER SAFETY AND POLLUTION PREVENTION, 1978.....	17
INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973..	52
PROTOCOL I PROVISIONS CONCERNING REPORTS ON INCIDENTS INVOLVING HARMFUL SUBSTANCES.....	62
PROTOCOL II ARBITRATION.....	64

1978 PROTOCOL RELATING TO THE 1973 INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS (INCLUDING ANNEXES, FINAL ACT AND 1973 INTERNATIONAL CONVENTION)

Adopted in London, United Kingdom on 17 February 1978

The Parties to the present Protocol,

Recognizing the significant contribution which can be made by the International Convention for the Prevention of Pollution from Ships, 1973, to the protection of the marine environment from pollution from ships,

Recognizing also the need to improve further the prevention and control of marine pollution from ships, particularly oil tankers,

Recognizing further the need for implementing the Regulations for the Prevention of Pollution by Oil contained in Annex I of that Convention as early and as widely as possible,

Acknowledging however the need to defer the application of Annex II of that Convention until certain technical problems have been satisfactorily resolved,

Considering that these objectives may best be achieved by the conclusion of a Protocol relating to the International Convention for the Prevention of Pollution from Ships, 1973,

Have agreed as follows:

ARTICLE I GENERAL OBLIGATIONS

1. The Parties to the present Protocol undertake to give effect to the provisions of:
 - (a) The present Protocol and the Annex hereto which shall constitute an integral part of the present Protocol; and
 - (b) The International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as "the Convention"), subject to the modification and additions set out in the present Protocol.
2. The provisions of the Convention and the present Protocol shall be read and interpreted together as one single instrument.
3. Every reference to the present Protocol constitutes at the same time a reference to the Annex hereto.

ARTICLE II IMPLEMENTATION OF ANNEX II OF THE CONVENTION

1. Notwithstanding the provisions of Article 14(1) of the Convention, the Parties to the present Protocol agree that they shall not be bound by the provisions of Annex II of the Convention for a period of three years from the date of entry into force of the present Protocol or for such longer period as may be decided by a two-thirds majority of the Parties to the present Protocol in the Marine Environment Protection Committee (hereinafter referred to as "the Committee") of the Inter-Governmental Maritime Consultative Organization (hereinafter referred to as "the Organization").
2. During the period specified in paragraph 1 of this Article, the Parties to the present Protocol shall not be under any obligations nor entitled to claim any privileges under the Convention in respect of matters relating to Annex II of the Convention and all reference to Parties in the Convention shall not include the Parties to the present Protocol in so far as matters relating to that Annex are concerned.

ARTICLE III COMMUNICATION OF INFORMATION

The text of Article 11(1)(b) of the Convention is replaced by the following: "A list of nominated surveyors or recognized organizations which are authorized to act on their behalf in the administration of matters relating to the design, construction, equipment and operation of ships carrying harmful substances in accordance with the provisions of the Regulations for circulation to the Parties for information of their officers. The Administration shall therefore notify the Organization of the specific responsibilities and conditions of the authority delegated to nominated surveyors or recognized organizations."

ARTICLE IV SIGNATURE, RATIFICATION, ACCEPTANCE, APPROVAL AND ACCESSION

1. The present Protocol shall be open for signature at the Headquarters of the Organization from 1 June 1978 to 31 May 1979 and shall thereafter remain open for accession. States may become Parties to the present Protocol by:
 - (a) Signature without reservation as to ratification, acceptance or approval; or
 - (b) Signature, subject to ratification, acceptance or approval, followed by ratification, acceptance or approval; or
 - (c) Accession.
2. Ratification, acceptance, approval or accession shall be effected by the deposit of an instrument to that effect with the Secretary-General of the Organization.

ARTICLE V ENTRY INTO FORCE

1. The present Protocol shall enter into force twelve months after the date on which not less than fifteen States, the combined merchant fleets of which constitute not less than fifty per cent of the gross tonnage of the world's merchant shipping, have become Parties to it in accordance with Article IV of the present Protocol.
2. Any instrument of ratification, acceptance, approval or accession deposited after the date on which the present Protocol enters into force shall take effect three months after the date of deposit.

3. After the date on which an amendment to the present Protocol is deemed to have been accepted in accordance with Article 16 of the Convention, any instrument of ratification, acceptance, approval or accession deposited shall apply to the present Protocol as amended.

ARTICLE VI AMENDMENTS

The procedures set out in Article 16 of the Convention in respect of amendments to the Articles, an Annex and an Appendix to an Annex of the Convention shall apply respectively to amendments to the Articles, the Annex and an Appendix to the Annex of the present Protocol.

ARTICLE VII DENUNCIATION

1. The present Protocol may be denounced by any Party to the present Protocol at any time after the expiry of five years from the date on which the Protocol enters into force for that Party.
2. Denunciation shall be effected by the deposit of an instrument of denunciation with the Secretary-General of the Organization.
3. A denunciation shall take effect twelve months after receipt of the notification by the Secretary-General of the Organization or after the expiry of any other longer period which may be indicated in the notification.

ARTICLE VIII DEPOSITARY

1. The present Protocol shall be deposited with the Secretary-General of the Organization (hereinafter referred to as "the Depositary").
2. The Depositary shall:
 - (a) Inform all States which have signed the present Protocol or acceded thereto of:
 - (i) Each new signature or deposit of an instrument of ratification, acceptance, approval or accession, together with the date thereof;
 - (ii) The date of entry into force of the present Protocol;
 - (iii) The deposit of any instrument of denunciation of the present Protocol together with the date on which it was received and the date on which the denunciation takes effect;
 - (iv) Any decision made in accordance with Article 11(1) of the present Protocol;
 - (b) Transmit certified true copies of the present Protocol to all States which have signed the present Protocol or acceded thereto.
3. As soon as the present Protocol enters into force, a certified true copy thereof shall be transmitted by the Depositary to the Secretariat of the United Nations for registration and publication in accordance with Article 102 of the Charter of the United Nations.

ARTICLE IX LANGUAGES

The present Protocol is established in a single original in the English, French, Russian and Spanish languages, each text being equally authentic. Official translations in the Arabic, German, Italian and Japanese languages shall be prepared and deposited with the signed original.

IN WITNESS WHEREOF the undersigned being duly authorized by their respective Governments for that purpose have signed the present Protocol.

DONE at London this seventeenth day of February one thousand nine hundred and seventy-eight.

ANNEX MODIFICATIONS AND ADDITIONS TO THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973

ANNEX I REGULATIONS FOR THE PREVENTION OF POLLUTION BY OIL

Regulation 1. Definitions

Paragraphs (1) to (7): No change.

The existing text of paragraph (8) is replaced by the following:

- (8) (a) "Major conversion" means a conversion of an existing ship:
- (i) Which substantially alters the dimensions or carrying capacity of the ship; or
 - (ii) Which changes the type of the ship; or
 - (iii) The intent of which in the opinion of the Administration is substantially to prolong its life; or
 - (iv) Which otherwise so alters the ship that, if it were a new ship, it would become subject to relevant provisions of the present Protocol not applicable to it as an existing ship.
- (b) Notwithstanding the provisions of sub-paragraph (a) of this paragraph, conversion of an existing oil tanker of 20,000 tons dead-weight and above to meet the requirements of Regulation 13 of this Annex shall not be deemed to constitute a major conversion for the purposes of this Annex.

Paragraphs (9) to (22): No change.

The existing text of paragraph (23) is replaced by the following:

- (23) "Lightweight" means the displacement of a ship in metric tons without cargo, fuel, lubricating oil, ballast water, fresh water and feed water in tanks, consumable stores, and passengers and crew and their effects.

Paragraphs (24) and (25): No change.

The following paragraphs are added to the existing text:

- (26) Notwithstanding the provisions of paragraph (6) of this Regulation, for the purposes of Regulations 13, 13B, 13E and 18(5) of this Annex, "new oil tanker" means an oil tanker:
- (a) For which the building contract is placed after 1 June 1979; or
 - (b) In the absence of a building contract, the keel of which is laid, or which is at a similar stage of construction after 1 January 1980; or
 - (c) The delivery of which is after 1 June 1982; or
 - (d) Which has undergone a major conversion:

- (i) For which the contract is placed after 1 June 1979; or
- (ii) In the absence of a contract, the construction work of which is begun after 1 January 1980; or
- (iii) Which is completed after 1 June 1982,

except that, for oil tankers of 70,000 tons deadweight and above, the definition in paragraph (6) of this Regulation shall apply for the purposes of Regulation 13(1) of this Annex.

(27) Notwithstanding the provisions of paragraph (7) of this Regulation, for the purposes of Regulations 13, 13A, 13B, 13C, 13D and 18(6) of this Annex, "existing oil tanker" means an oil tanker which is not a new oil tanker as defined in paragraph (26) of this Regulation.

(28) "Crude oil" means any liquid hydrocarbon mixture occurring naturally in the earth whether or not treated to render it suitable for transportation and includes:

- (a) Crude oil from which certain distillate fractions may have been removed; and
- (b) Crude oil to which certain distillate fractions may have been added.

(29) "Crude oil tanker" means an oil tanker engaged in the trade of carrying crude oil.

(30) "Product carrier" means an oil tanker engaged in the trade of carrying oil other than crude oil.

Regulations 2 and 3: No Change

Regulation 4

The existing text of Regulation 4 is replaced by the following:

SURVEYS AND INSPECTIONS

- (1) Every oil tanker of 150 tons gross tonnage and above, and every other ship of 400 tons gross tonnage and above shall be subject to the surveys specified below:
 - (a) An initial survey before the ship is put in service or before the Certificate required under Regulation 5 of this Annex is issued for the first time, which shall include a complete survey of its structure, equipment, systems, fittings, arrangements and material in so far as the ship is covered by this Annex. This survey shall be such as to ensure that the structure, equipment, systems, fittings, arrangements and material fully comply with the applicable requirements of this Annex.
 - (b) Periodical surveys at intervals specified by the Administration, but not exceeding five years, which shall be such as to ensure that the structure, equipment, systems, fittings, arrangements and material fully comply with the requirements of this Annex.
 - (c) A minimum of one intermediate survey during the period of validity of the Certificate which shall be such as to ensure that the equipment and associated pump and piping systems, including oil discharge monitoring and control systems, crude oil washing systems, oily-water separating equipment and oil filtering systems, fully comply with the applicable requirements of this Annex and are in good working order. In cases where only one such intermediate survey is carried out in any one Certificate validity period, it shall be held not before six months prior to, nor later than six months after the half-way date of the

Certificate's period of validity. Such intermediate surveys shall be endorsed on the Certificate issued under Regulation 5 of this Annex.

- (2) The Administration shall establish appropriate measures for ships which are not subject to the provisions of paragraph (1) of this Regulation in order to ensure that the applicable provisions of this Annex are complied with.
- (3)
 - (a) Surveys of ships as regards the enforcement of the provisions of this Annex shall be carried out by officers of the Administration. The Administration may, however, entrust the surveys either to surveyors nominated for the purpose or to organizations recognized by it.
 - (b) The Administration shall institute arrangements for unscheduled inspections to be carried out during the period of validity of the Certificate. Such inspections shall ensure that the ship and its equipment remain in all respects satisfactory for the service for which the ship is intended. These inspections may be carried out by their own inspection services, or by nominated surveyors or by recognized organizations, or by other Parties upon request of the Administration. Where the Administration, under the provisions of paragraph (1) of this Regulation, establishes mandatory annual surveys, the above unscheduled inspections shall not be obligatory.
 - (c) An Administration nominating surveyors or recognizing organizations to conduct surveys and inspections as set forth in sub-paragraphs (a) and (b) of this paragraph, shall as a minimum empower any nominated surveyor or recognized organization to:
 - (i) Require repairs to a ship; and
 - (ii) Carry out surveys and inspections if requested by the appropriate authorities of a Port State.

The Administration shall notify the Organization of the specific responsibilities and conditions of the authority delegated to the nominated surveyors or recognized organizations, for circulation to Parties to the present Protocol for the information of their officers.

- (d) When a nominated surveyor or recognized organization determines that the condition of the ship or its equipment does not correspond substantially with the particulars of the Certificate or is such that the ship is not fit to proceed to sea without presenting an unreasonable threat of harm to the marine environment, such surveyor or organization shall immediately ensure that corrective action is taken and shall in due course notify the Administration. If such corrective action is not taken the Certificate should be withdrawn and the Administration shall be notified immediately; and if the ship is in a port of another Party, the appropriate authorities of the Port State shall also be notified immediately. When an officer of the Administration, a nominated surveyor or recognized organization has notified the appropriate authorities of the Port State, the Government of the Port State concerned shall give such officer, surveyor or organization any necessary assistance to carry out their obligations under this Regulation. When applicable, the Government of the Port State concerned shall take such steps as will ensure that the ship shall not sail until it can proceed to sea or leave the port for the purpose of proceeding to the nearest appropriate repair yard available without presenting an unreasonable threat of harm to the marine environment.
- (e) In every case, the Administration concerned shall fully guarantee the completeness and efficiency of the survey and inspection and shall undertake to ensure the necessary arrangements to satisfy this obligation.

- (4) (a) The condition of the ship and its equipment shall be maintained to conform with the provisions of the present Protocol to ensure that the ship in all respects will remain fit to proceed to sea without presenting an unreasonable threat of harm to the marine environment.
- (b) After any survey of the ship under paragraph (1) of this Regulation has been completed, no change shall be made in the structure, equipment, systems, fittings, arrangements or material covered by the survey, without the sanction of the Administration, except the direct replacement of such equipment and fittings.
- (c) Whenever an accident occurs to a ship or a defect is discovered which substantially affects the integrity of the ship or the efficiency or completeness of its equipment covered by this Annex the master or owner of the ship shall report at the earliest opportunity to the Administration, the recognized organization or the nominated surveyor responsible for issuing the relevant Certificate, who shall cause investigations to be initiated to determine whether a survey as required by paragraph (1) of this Regulation is necessary. If the ship is in a port of another Party, the master or owner shall also report immediately to the appropriate authorities of the Port State and the nominated surveyor or recognized organization shall ascertain that such report has been made.

Regulations 5, 6 and 7

In the existing text of these Regulations, delete all references to "(1973)" in relation to the International Oil Pollution Prevention Certificate.

Regulation 8. Duration of Certificate

The existing text of Regulation 8 is replaced by the following:

- (1) An International Oil Pollution Prevention Certificate shall be issued for a period specified by the Administration, which shall not exceed five years from the date of issue, provided that in the case of an oil tanker operating with dedicated clean ballast tanks for a limited period specified in Regulation 13(9) of this Annex, the period of validity of the Certificate shall not exceed such specified period.
- (2) A Certificate shall cease to be valid if significant alterations have taken place in the construction, equipment, systems, fittings, arrangements or material required without the sanction of the Administration, except the direct replacement of such equipment or fittings, or if intermediate surveys as specified by the Administration under Regulation 4(l)(c) of this Annex are not carried out.
- (3) A Certificate issued to a ship shall also cease to be valid upon transfer of the ship to the flag of another State. A new Certificate shall only be issued when the Government issuing the new Certificate is fully satisfied that the ship is in full compliance with the requirements of Regulation 4(4)(a) and (b) of this Annex. In the case of a transfer between Parties, if requested within three months after the transfer has taken place, the Government of the Party whose flag the ship was formerly entitled to fly shall transmit as soon as possible to the Administration a copy of the Certificate carried by the ship before the transfer and, if available, a copy of the relevant survey report.

Regulations 9 to 12: No Change

The existing text of Regulation 13 is replaced by the following Regulations:

Regulation 13. Segregated Ballast Tanks, Dedicated Clean Ballast Tanks and Crude Oil Washing

Subject to the provisions of Regulations 13C and 13D of this Annex, oil tankers shall comply with the requirements of this Regulation.

New oil tankers of 20,000 tons deadweight and above

- (1) Every new crude oil tanker of 20,000 tons deadweight and above and every new product carrier of 30,000 tons deadweight and above shall be provided with segregated ballast tanks and shall comply with paragraphs (2), (3) and (4), or paragraph (5) as appropriate, of this Regulation.
- (2) The capacity of the segregated ballast tanks shall be so determined that the ship may operate safely on ballast voyages without recourse to the use of cargo tanks for water ballast except as provided for in paragraph (3) or (4) of this Regulation. In all cases, however, the capacity of segregated ballast tanks shall be at least such that, in any ballast condition at any part of the voyage, including the conditions consisting of lightweight plus segregated ballast only, the ship's draughts and trim can meet each of the following requirements:
 - (a) The moulded draught amidships (dm) in metres (without taking into account any ship's deformation) shall not be less than: $dm = 2.0 + 0.02L$;
 - (b) The draughts at the forward and after perpendiculars shall correspond to those determined by the draught amidships (dm) as specified in sub-paragraph (a) of this paragraph, in association with the trim by the stern of not greater than 0.015L; and
 - (c) In any case the draught at the after perpendicular shall not be less than that which is necessary to obtain full immersion of the propeller(s).
- (3) In no case shall ballast water be carried in cargo tanks except on those rare voyages when weather conditions are so severe that, in the opinion of the master, it is necessary to carry additional ballast water in cargo tanks for the safety of the ship. Such additional ballast water shall be processed and discharged in compliance with Regulation 9 of this Annex and in accordance with the requirements of Regulation 15 of this Annex and entry shall be made in the Oil Record Book referred to in Regulation 20 of this Annex.
- (4) In the case of new crude oil tankers, the additional ballast permitted in paragraph (3) of this Regulation shall be carried in cargo tanks only if such tanks have been crude oil washed in accordance with Regulation 13B of this Annex before departure from an oil unloading port or terminal.
- (5) Notwithstanding the provisions of paragraph (2) of this Regulation, the segregated ballast conditions for oil tankers less than 150 metres in length shall be to the satisfaction of the Administration.
- (6) Every new crude oil tanker of 20,000 tons deadweight and above shall be fitted with a cargo tank cleaning system using crude oil washing. The Administration shall undertake to ensure that the system fully complies with the requirements of Regulation 13B of this Annex within one year after the tanker was first engaged in the trade of carrying crude oil or by the end of the third voyage carrying crude oil suitable for crude oil washing, whichever occurs later. Unless such oil tanker carries crude oil which is not suitable for crude oil washing, the oil tanker shall operate the system in accordance with the requirements of that Regulation.

Existing crude oil tankers of 40,000 tons deadweight and above

- (7) Subject to the provisions of paragraphs (8) and (9) of this Regulation every existing crude oil tanker of 40,000 tons deadweight and above shall be provided with segregated ballast tanks and shall comply with the requirements of paragraphs (2) and (3) of this Regulation from the date of entry into force of the present Protocol.
- (8) Existing crude oil tankers referred to in paragraph (7) of this Regulation may, in lieu of being provided with segregated ballast tanks, operate with a cargo tank cleaning procedure using crude oil washing in accordance with Regulation 13B of this Annex unless the crude oil tanker is intended to carry crude oil which is not suitable for crude oil washing.
- (9) Existing crude oil tankers referred to in paragraph (7) or (8) of this Regulation may, in lieu of being provided with segregated ballast tanks or operating with a cargo tank cleaning procedure using crude oil washing, operate with dedicated clean ballast tanks in accordance with the provisions of Regulation 13A of this Annex for the following period:
 - (a) For crude oil tankers of 70,000 tons deadweight and above, until two years after the date of entry into force of the present Protocol; and
 - (b) For crude oil tankers of 40,000 tons deadweight and above but below 70,000 tons deadweight, until four years after the date of entry into force of the present Protocol.

Existing product carriers of 40,000 tons deadweight and above

- (10) From the date of entry into force of the present Protocol, every existing product carrier of 40,000 tons deadweight and above shall be provided with segregated ballast tanks and shall comply with the requirements of paragraphs (2) and (3) of this Regulation, or, alternatively, operate with dedicated clean ballast tanks in accordance with the provisions of Regulation 13A of this Annex.

An oil tanker qualified as a segregated ballast oil tanker

- (11) Any oil tanker which is not required to be provided with segregated ballast tanks in accordance with paragraph (1), (7) or (10) of this Regulation may, however, be qualified as a segregated ballast tanker, provided that it complies with the requirements of paragraphs (2) and (3), or paragraph (5) as appropriate, of this Regulation.

Regulation 13A. Requirements for Oil Tankers with Dedicated Clean Ballast Tanks

- (1) An oil tanker operating with dedicated clean ballast tanks in accordance with the provisions of Regulation 13(9) or (10) of this Annex, shall have adequate tank capacity, dedicated solely to the carriage of clean ballast as defined in Regulation 1(16) of this Annex, to meet the requirements of Regulation 13(2) and (3) of this Annex.
- (2) The arrangements and operational procedures for dedicated clean ballast tanks shall comply with the requirements established by the Administration. Such requirements shall contain at least all the provisions of the Specifications for Oil Tankers with Dedicated Clean Ballast Tanks adopted by the International Conference on Tanker Safety and Pollution Prevention, 1978, in Resolution 14 and as may be revised by the Organization.
- (3) An oil tanker operating with dedicated clean ballast tanks shall be equipped with an oil content meter, approved by the Administration on the basis of specifications recommended by the

Organization¹, to enable supervision of the oil content in ballast water being discharged. The oil content meter shall be installed no later than at the first scheduled shipyard visit of the tanker following the entry into force of the present Protocol. Until such time as the oil content meter is installed, it shall immediately before discharge of ballast be established by examination of the ballast water from dedicated tanks that no contamination with oil has taken place.

- (4) Every oil tanker operating with dedicated clean ballast tanks shall be provided with:
- (5) (a) A Dedicated Clean Ballast Tank Operation Manual detailing the system and specifying operational procedures. Such a Manual shall be to the satisfaction of the Administration and shall contain all the information set out in the Specifications referred to in paragraph (2) of this Regulation. If an alteration affecting the dedicated clean ballast tank system is made, the Operation Manual shall be revised accordingly; and
- (b) A Supplement to the Oil Record Book referred to in Regulation 20 of this Annex as set out in Supplement 1 to Appendix III of this Annex. The Supplement shall be permanently attached to the Oil Record Book.

Regulation 13B. Requirements for Crude Oil Washing

- (1) Every crude oil washing system required to be provided in accordance with Regulation 13(6) and (8) of this Annex shall comply with the requirements of this Regulation.
- (2) The crude oil washing installation and associated equipment and arrangements shall comply with the requirements established by the Administration. Such requirements shall contain at least all the provisions of the Specifications for the Design, Operation and Control of Crude Oil Washing Systems adopted by the International Conference on Tanker Safety and Pollution Prevention, 1978, in Resolution 15 and as may be revised by the Organization.
- (3) An inert gas system shall be provided in every cargo tank and slop tank in accordance with the appropriate Regulations of Chapter II-2 of the International Convention for the Safety of Life at Sea, 1974,² as modified and added to by the Protocol of 1978 Relating to the International Convention for the Safety of Life at Sea, 1974.³
- (4) With respect to the ballasting of cargo tanks, sufficient cargo tanks shall be crude oil washed prior to each ballast voyage in order that, taking into account the tanker's trading pattern and expected weather conditions, ballast water is put only into cargo tanks which have been crude oil washed.
- (5) Every oil tanker operating with crude oil washing systems shall be provided with:
- (a) An Operations and Equipment Manual detailing the system and equipment and specifying operational procedures. Such a Manual shall be to the satisfaction of the Administration and shall contain all the information set out in the Specifications referred to in paragraph (2) of this Regulation. If an alteration affecting the crude oil washing system is made, the Operations and Equipment Manual shall be revised accordingly; and

¹ Reference is made to the Recommendation on International Performance and Test Specifications for Oily-Water Separating Equipment and Oil Content Meters adopted by the Organization by Resolution A.393(X).

² United Nations, Treaty Series, vol. 1184, p. 2.

³ Ibid., vol. 1226, p. 213.

- (b) A Supplement to the Oil Record Book referred to in Regulation 20 of this Annex as set out in Supplement 2 to Appendix III of this Annex. The Supplement shall be permanently attached to the Oil Record Book.

Regulation 13C. Existing Tankers Engaged in Specific Trades

- (1) Subject to the provisions of paragraphs (2) and (3) of this Regulation, Regulation 13(7) to (10) of this Annex shall not apply to an existing oil tanker solely engaged in specific trades between:
 - (a) Ports or terminals within a State Party to the present Protocol; or
 - (b) Ports or terminals of States Parties to the present Protocol, where:
 - (i) The voyage is entirely within a Special Area as defined in Regulation 10(1) of this Annex; or
 - (ii) The voyage is entirely within other limits designated by the Organization.
- (2) The provisions of paragraph (1) of this Regulation shall only apply when the ports or terminals where cargo is loaded on such voyages are provided with reception facilities adequate for the reception and treatment of all the ballast and tank washing water from oil tankers using them and all the following conditions are complied with:
 - (a) Subject to the exceptions provided for in Regulation 11 of this Annex, all ballast water, including clean ballast water, and tank washing residues are retained on board and transferred to the reception facilities and the entry in the appropriate Sections of the Supplement to the Oil Record Book referred to in paragraph (3) of this Regulation is endorsed by the competent Port State authority;
 - (b) Agreement has been reached between the Administration and the Governments of the Port States referred to in subparagraph (1)(a) or (b) of this Regulation concerning the use of an existing oil tanker for a specific trade;
 - (c) The adequacy of the reception facilities in accordance with the relevant provisions of this Annex at the ports or terminals referred to above, for the purpose of this Regulation, is approved by the Governments of the States Parties to the present Protocol within which such ports or terminals are situated; and
 - (d) The International Oil Pollution Prevention Certificate is endorsed to the effect that the oil tanker is solely engaged in such specific trade.
- (3) Every oil tanker engaged in a specific trade shall be provided with a Supplement to the Oil Record Book referred to in Regulation 20 of this Annex as set out in Supplement 3 to Appendix III of this Annex. The Supplement shall be permanently attached to the Oil Record Book.

Regulation 13D. Existing Oil Tankers Having Special Ballast Arrangements

- (1) Where an existing oil tanker is so constructed or operates in such a manner that it complies at all times with the draught and trim requirements set out in Regulation 13(2) of this Annex without recourse to the use of ballast water, it shall be deemed to comply with the segregated ballast tank requirements referred to in Regulation 13(7) of this Annex, provided that all of the following conditions are complied with:
 - (a) Operational procedures and ballast arrangements are approved by the Administration;
 - (b) Agreement is reached between the Administration and the Governments of the Port States Parties to the present Protocol concerned when the draught and trim requirements are achieved through an operational procedure; and
 - (c) The International Oil Pollution Prevention Certificate is endorsed to the effect that the oil tanker is operating with special ballast arrangements.
- (2) In no case shall ballast water be carried in oil tanks except on those rare voyages when weather conditions are so severe that, in the opinion of the master, it is necessary to carry additional ballast water in cargo tanks for the safety of the ship. Such additional ballast water shall be processed and discharged in compliance with Regulation 9 of this Annex and in accordance with the requirements of Regulation 15 of this Annex, and entry shall be made in the Oil Record Book referred to in Regulation 20 of this Annex.
- (3) An Administration which has endorsed a Certificate in accordance with subparagraph (1)(c) of this Regulation shall communicate to the Organization the particulars thereof for circulation to the Parties to the present Protocol.

Regulation 13E. Protective Location of Segregated Ballast Spaces

- (1) In every new crude oil tanker of 20,000 tons deadweight and above and every new product carrier of 30,000 tons deadweight and above, the segregated ballast tanks required to provide the capacity to comply with the requirements of Regulation 13 of this Annex which are located within the cargo tank length, shall be arranged in accordance with the requirements of paragraphs (2), (3) and (4) of this Regulation to provide a measure of protection against oil outflow in the event of grounding or collision.
- (2) Segregated ballast tanks and spaces other than oil tanks within the cargo tank length (Lt) shall be so arranged as to comply with the following requirement:

$$\Sigma \text{PAC} + \Sigma \text{PAS} \geq J[\text{Lt} (\text{B} + 2\text{D})]$$

where:

PAC = the side shell area in square metres for each segregated ballast tank or space other than an oil tank based on projected moulded dimensions,

PAS = the bottom shell area in square metres for each such tank or space based on projected moulded dimensions,

Lt = length in metres between the forward and after extremities of the cargo tanks,

B = maximum breadth of the ship in metres as defined in Regulation 1(21) of this Annex,

D = moulded depth in metres measured vertically from the top of the keel to the top of the freeboard deck beam at side amidships. In ships having rounded gunwales, the moulded depth shall be measured to the point of intersection of the moulded lines of the deck and side shell plating, the lines extending as though the gunwale were of angular design,

J = 0.45 for oil tankers of 20,000 tons deadweight 0.30 for oil tankers of 200,000 tons deadweight and above, subject to the provisions of paragraph (3) of this Regulation.

For intermediate values of deadweight the value of "J" shall be determined by linear interpolation.

Whenever symbols given in this paragraph appear in this Regulation, they have the meaning as defined in this paragraph.

(3) For tankers of 200,000 tons deadweight and above the value of "J" may be reduced as follows:

$$J \text{ reduced} = [J - (a - O_C + O_S / 4 O_A)] \text{ or } 0.2 \text{ whichever is greater}$$

where:

a = 0.25 for oil tankers of 200,000 tons deadweight

a = 0.40 for oil tankers of 300,000 tons deadweight

a = 0.50 for oil tankers of 420,000 tons deadweight and above,

For intermediate values of deadweight the value of "a" shall be determined by linear interpolation.

O_C = as defined in Regulation 23(l)(a) of this Annex,

O_S = as defined in Regulation 23(l)(b) of this Annex,

O_A = the allowable oil outflow as required by Regulation 24(2) of this Annex.

(4) In the determination of "PAC" and "PAS" for segregated ballast tanks and spaces other than oil tanks the following shall apply:

- (a) The minimum width of each wing tank or space either of which extends for the full depth of the ship's side or from the deck to the top of the double bottom shall be not less than 2 metres. The width shall be measured inboard from the ship's side at right angles to the centre line. Where a lesser width is provided the wing tank or space shall not be taken into account when calculating the protecting area "PAC"; and
- (b) The minimum vertical depth of each double bottom tank or space shall be B/15 or 2 metres, whichever is the lesser. Where a lesser depth is provided the bottom tank or space shall not be taken into account when calculating the protecting area "PAS".

The minimum width and depth of wing tanks and double bottom tanks shall be measured clear of the bilge area and, in the case of minimum width, shall be measured clear of any rounded gunwale area.

Regulation 14: No Change

Regulation 15

In the existing text of this Regulation, delete reference to "(1973)" in relation to the International Oil Pollution Prevention Certificate.

Regulations 16 and 17: No Change

Regulation 18. Pumping, Piping and Discharge Arrangements of Oil Tankers

Paragraphs (1) to (4): No change.

The following paragraphs are added to the existing text:

- (5) Every new oil tanker required to be provided with segregated ballast tanks, or fitted with a crude oil washing system shall comply with the following requirements:
 - (a) It shall be equipped with oil piping so designed and installed such that oil retention in the lines is minimized; and
 - (b) Means shall be provided to drain all cargo pumps and all oil lines at the completion of cargo discharge, where necessary by connexion to a stripping device. The line and pump drainings shall be capable of being discharged both ashore and to a cargo tank or a slop tank. For discharge ashore a special small diameter line shall be provided for that purpose and connected outboard of the ship's manifold valves.
- (6) Every existing crude oil carrier required to be provided with segregated ballast tanks, or fitted with a crude oil washing system or operated with dedicated clean ballast tanks, shall comply with the provisions of paragraph (5)(b) of this Regulation.

Regulation 19: No Change

Regulation 20

In the existing text of this Regulation, delete reference to "(1973)" in relation to the International Oil Pollution Prevention Certificate.

Regulations 21 to 25: No Change

Appendix I List of Oils: No Change

Appendix II Form of Certificate

(Access via <http://treaties.un.org/doc/Publication/UNTS/Volume%201340/volume-1340-I-22484-English.pdf>)

Appendix III Form of Oil Record Book

(Access via <http://treaties.un.org/doc/Publication/UNTS/Volume%201340/volume-1340-I-22484-English.pdf>)

ANNEX II REGULATIONS FOR THE CONTROL OF POLLUTION BY NOXIOUS LIQUID SUBSTANCES IN BULK

No change

**ANNEX III REGULATIONS FOR THE PREVENTION OF POLLUTION BY HARMFUL
SUBSTANCES CARRIED BY SEA IN PACKAGED FORMS, OR IN FREIGHT CONTAINERS,
PORTABLE TANKS OR ROAD AND RAIL TANK WAGONS**

No change

ANNEX IV REGULATIONS FOR THE PREVENTION OF POLLUTION BY SEWAGE FROM SHIPS

No change

ANNEX V REGULATIONS FOR THE PREVENTION OF POLLUTION BY GARBAGE FROM SHIPS

No change

**FINAL ACT OF THE INTERNATIONAL CONFERENCE ON TANKER
SAFETY AND POLLUTION PREVENTION, 1978**

1. In consideration of recommendations made by the Maritime Safety Committee, the Council of the Inter-Governmental Maritime Consultative Organization decided, on 25 May 1977, to convene the International Conference on Tanker Safety and Pollution Prevention which was held in London from 6 to 17 February 1978.
2. Upon the invitation of the Inter-Governmental Maritime Consultative Organization, the following States were represented by delegations at the Conference:

Algeria	Liberia
Argentina	Malaysia
Australia	Mexico
Bahamas	Morocco
Bahrain	Netherlands
Barbados	New Zealand
Belgium	Nigeria
Brazil	Norway
Bulgaria	Oman
Canada	Panama
Chile	Philippines
Colombia	Poland
Cuba	Portugal
Cyprus	Republic of Korea
Denmark	Romania

Egypt	Saudi Arabia
Finland	Senegal
France	Singapore
German Democratic Republic	Spain
Germany, Federal Republic of	Sweden
Ghana	Thailand
Greece	Trinidad and Tobago
India	Tunisia
Indonesia	Turkey
Iran	Union of Soviet Socialist Republics
Iraq	United Kingdom of Great Britain and Northern Ireland
Israel	United States of America
Italy	Uruguay
Japan	Venezuela
Kenya	Yugoslavia
Kuwait	

3. The following States were represented at the Conference by observers:

China

Ecuador

Mauritius

4. At the invitation of the Organization, the following organization in the United Nations system sent a representative to the Conference:

United Nations Environment Programme (UNEP)

5. The following inter-governmental organizations sent observers to the Conference:

Organisation for Economic Co-operation and Development (OECD) Commission of the European Communities (EEC)

6. The following non-governmental organizations also sent observers to the Conference:

International Chamber of Shipping (ICS)

International Shipping Federation (ISF)

International Union of Marine Insurance (IUMI)

International Confederation of Free Trade Unions (ICFTU)

International Radio-Maritime Committee (CIRM)

International Association of Ports and Harbors (IAPH)

Baltic and International Maritime Conference (BIMCO)

International Association of Classification Societies (IACS)

Oil Companies International Marine Forum (OCIMF)

International Shipowners' Association (INSA)

Engineering Committee on Oceanic Resources (ECOR)

Friends of the Earth International (FOE)

International Association of Institutes of Navigation (IAIN)

Association of West European Shipbuilders (AWES)

7. At the opening of the Conference, Mr. S. Clinton Davis, Parliamentary Under-Secretary of State for Companies, Aviation and Shipping of the Department of Trade of the United Kingdom, made a statement on behalf of Her Majesty's Government welcoming delegates to the Conference.
8. His Excellency Mr. Manuel Tello, C.M.G. of the delegation of Mexico was elected President of the Conference. The following Vice-Presidents were also elected:

Mr. M. Jacquier (France)

Mr. P. Gavai (India)

Mr. R. Adero (Kenya)

H.E. Mr. Said Ben Ammar (Tunisia)

Mr. A. Kolesnitchenko (USSR)

9. The following officers of the Conference were appointed:

Secretary-General: Mr. C. P. Srivastava;

Executive Secretaries: Captain G. P. Kostylev, Mr. Y. Sasamura.

10. The Conference established the following Committees:

Committee I

Chairman: Mr. J. Vonau (Poland);

Vice-Chairman: Mr. S. Abboud (Egypt).

Committee II

Chairman: Mr. P. Eriksson (Sweden);

Vice-Chairman: Mr. J. H. Birtwhistle (Canada).

Committee III

Chairman: Dr. L. Spinelli (Italy);

Vice-Chairman: Captain J. F. Schwarz (Argentina).

Credentials Committee

Chairman: Captain S. Tardana (Indonesia).

Drafting Committee

Chairman: Mr. S. N. Burbridge (United Kingdom).

11. The following documentation formed the basis for the work of the Conference:

- The International Convention for the Prevention of Pollution from Ships, 1973;
- The International Convention for the Safety of Life at Sea, 1974;⁴
- Draft Protocols to those Conventions jointly prepared by the Maritime Safety Committee and the Marine Environment Protection Committee of the Organization;
- Draft Resolutions relating to the improvement of safety at sea and the prevention of marine pollution from ships;
- Proposals and comments submitted to the Conference by interested governments and organizations.

12. As a result of its deliberations which are recorded in the summary records and reports of the Conference, the following instruments were adopted by the Conference:

Protocol of 1978 relating to the International Convention for the Safety of life at Sea, 1974⁵ and

Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973

The above Protocols constitute Attachments 1 and 2 to this Final Act respectively.

⁴ United Nations, Treaty Series, vol. 1185, p. 2.

⁵ Ibid., vol. 1226, p. 213.

13. The Conference also adopted the Resolutions shown at Attachment 3 to this Final Act.
14. The text of this Final Act, including its Attachments, is deposited with the Secretary-General of the Inter-Governmental Maritime Consultative Organization. It is established in a single original in the English, French, Russian and Spanish languages, and is accompanied by the texts of the Protocol of 1978 Relating to the International Convention for the Safety of Life at Sea, 1974, and of the Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships, 1973. The texts of the Protocols appear in the authentic languages specified in the Conventions to which they relate. Official translations of the Protocols will be prepared in the languages specified in the Conventions to which they relate. Originals of these official translations will be deposited with this Final Act.
15. The Secretary-General of the Inter-Governmental Maritime Consultative Organization shall send certified copies of this Final Act with the Resolutions of the Conference, certified copies of the authentic texts of the Protocols and, when they have been prepared, official translations of the Protocols, to the Governments of the States invited to be represented at the Conference, in accordance with the wishes of those Governments.

IN WITNESS WHEREOF the undersigned have affixed their signatures to this Final Act.

DONE at London this seventeenth day of February one thousand nine hundred and seventy-eight.

RESOLUTION 1

TARGET DATE FOR THE ENTRY INTO FORCE OF THE PROTOCOL OF 1978 RELATING TO THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973

The Conference,

Recognizing that the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973, (MARPOL Protocol) when implemented, would substantially achieve the complete elimination of intentional pollution of the marine environment by oil and other harmful substances and the minimization of accidental discharge of such substances,

Desiring to bring the MARPOL Protocol which incorporates and modifies the International Convention for the Prevention of Pollution from Ships, 1973, (MARPOL Convention) into force as soon as possible,

Taking note of the work by the Inter-Governmental Maritime Consultative Organization to resolve the technical problems involved in the implementation of the MARPOL Convention,

Recommends that all Governments concerned adopt a target date of June 1981 for the entry into force of the MARPOL Protocol which incorporates and modifies the MARPOL Convention,

Recommends also that those States which contemplate becoming Parties to the MARPOL Protocol:

- (a) Make every effort to deposit their instruments of ratification, approval, acceptance or accession at as early a date as possible but not later than June 1980;
- (b) If they have not deposited such instruments before June 1980, give the Secretary-General of the Organization by that date an indication of the period within which they expect to be able to do so,

Recommends further that, prior to the entry into force of the MARPOL Protocol, Governments should ensure that the provisions of that Protocol are applied by the date fixed to new ships in respect of requirements which contain a specific implementation date,

Noting that, with regard to existing oil tankers, the MARPOL Protocol prescribes that requirements should be implemented in relation to the date on which the Protocol enters into force,

Invites all Governments concerned to put these requirements into effect, to the maximum extent, without waiting for the entry into force of the MARPOL Protocol, by June 1981, or as soon as possible thereafter, namely:

- For existing crude oil tankers:

Requirements for segregated ballast tanks, crude oil washing system or dedicated clean ballast tanks contained in Regulation 13 of Annex I of the MARPOL Protocol

- For existing product carriers:

Requirements for segregated ballast tanks or dedicated clean ballast tanks contained in Regulation 13 of Annex I of the MARPOL Protocol,

Recommends that the eleventh session of the Assembly of the Organization in 1979 review progress towards meeting those dates.

RESOLUTION 2
TARGET DATE FOR THE ENTRY INTO FORCE OF THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, AND THE PROTOCOL OF 1978 RELATING TO THAT CONVENTION

The Conference,

Recognizing that the International Convention for the Safety of Life at Sea, 1974, (SOLAS Convention) and the Protocol of 1978 relating to that Convention (SOLAS Protocol) when implemented, can make a significant improvement in the safety of ships and property at sea and the life of persons on board,

Noting that the SOLAS Protocol adopted by the Conference cannot enter into force before the SOLAS Convention enters into force,

Desiring to bring the SOLAS Convention and the SOLAS Protocol into force as soon as possible,

Recommends that all Governments concerned adopt a target date of June 1979 for the entry into force of the SOLAS Convention and endeavour to ensure that the SOLAS Protocol enters into force at the same time or as soon as possible thereafter,

Recommends also that those States which contemplate becoming Parties to the SOLAS Convention:

- (a) Make every effort to deposit their instruments of ratification, approval, acceptance or accession at the earliest possible date, but not later than June 1978;
- (b) Deposit instruments of ratification, approval or acceptance of, or accession to, the SOLAS Protocol when it is open for signature or as soon as possible thereafter; and when it becomes possible to do so, endeavour to deposit instruments of ratification, approval or acceptance of, or accession to, both the SOLAS Convention and the SOLAS Protocol simultaneously;
- (c) If they have not deposited such instruments before June 1978, give the Secretary-General of the Inter-Governmental Maritime Consultative Organization by that date an indication of the period within which they expect to be able to do so,

Recommends also that States which have deposited instruments of ratification of the SOLAS Convention should deposit instruments of ratification of the SOLAS Protocol as soon as possible,

Recommends further that, prior to the entry into force of the SOLAS Protocol, Administrations should ensure that the provisions of that instrument are applied to new tankers by the date fixed in respect of requirements which contain a specific implementation date,

Noting that, with regard to existing ships, the SOLAS Protocol prescribes that the requirements should be implemented in relation to the date on which that Protocol enters into force,

Invites all Governments concerned to put these requirements into effect to the maximum extent, without waiting for the entry into force of the SOLAS Protocol, by the following dates, or as soon as possible thereafter, namely:

- Requirements for inert gas systems contained in Regulation 60 of Chapter II-2 of the SOLAS Protocol

Existing tankers of 70,000 tons deadweight and above: by June 1981

Existing tankers of 40,000 tons deadweight and above but below 70,000 tons deadweight, and existing crude oil tankers of 20,000 tons and above but below 40,000 tons dead weight fitted with high capacity tank washing machines: by June 1983

- Requirements for steering gear for existing tankers contained in Regulation 29(d) of Chapter II-1 of the SOLAS Protocol: by June 1981,

Recommends that the eleventh session of the Assembly of the Inter-Governmental Maritime Consultative Organization in 1979 review progress towards meeting these dates.

RESOLUTION 3

FUTURE DEVELOPMENTS AIMED AT ELIMINATING POLLUTION

The Conference,

Noting that Resolutions 1 and 3 of the International Conference on Marine Pollution, 1973, expressed the belief that the International Convention for the Prevention of Pollution from Ships, 1973, will, when implemented, constitute a further important step towards the complete elimination of pollution of the sea by harmful substances from ships,

Believing that the Protocol of 1978 relating to that Convention (MARPOL Protocol) will further contribute towards the objective of eliminating pollution by oil,

Noting the provisions of the MARPOL Protocol extending the requirements for segregated ballast tanks to all new crude oil tankers of 20,000 tons deadweight and above and also making the crude oil washing systems obligatory for such oil tankers,

Being aware that the combination of the requirements for segregated ballast tanks and crude oil washing systems provides Administrations with a greatly improved ability to meet the objective of completely eliminating pollution of the sea from ships,

Recommends that such combination of requirements should be an ultimate objective of the Inter-Governmental Maritime Consultative Organization in respect of pollution from crude oil tankers,

Invites the Organization to develop, not later than 1986, proposals for appropriate amendments to the MARPOL Protocol to achieve the above objective.

RESOLUTION 4

CONTROL PROCEDURES FOR EXISTING CRUDE OIL TANKERS OF LESS THAN 40,000 TONS DEADWEIGHT

The Conference,

Having adopted the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973, (MARPOL Protocol),

Noting that the MARPOL Protocol contains new requirements relating to the carriage of ballast and the washing of cargo tanks in oil tankers of 40,000 tons deadweight and above,

Recognizing that in order to implement these requirements effectively, continuing strong emphasis should be placed on the effective operation of washing procedures, which will be required regardless of whether existing oil tankers of 40,000 tons deadweight and above operate with segregated ballast tanks, crude oil washing systems or dedicated clean ballast tanks,

Recognizing also that for existing tankers of less than 40,000 tons deadweight full reliance will need to be placed on the effective operation of the systems to be used for retaining the oil on board,

Recognizing further the progress made by the Inter-Governmental Maritime Consultative Organization in developing procedures for the control of discharges referred to in Resolution 6 adopted by this Conference,

Urges Governments to pay special attention to implementing those procedures on tankers of less than 40,000 tons deadweight, both in loading and unloading ports or terminals,

Recommends that the measures taken to implement such procedures should be kept under regular review by the Organization.

RESOLUTION 5

FURTHER DEVELOPMENT OF INTERNATIONAL STANDARDS FOR INERT GAS SYSTEMS

The Conference,

Recognizing that the International Convention for the Safety of Life at Sea, 1974 (SOLAS Convention) and the Protocol of 1978 relating to that Convention (SOLAS Protocol) significantly extend the application of inert gas systems to both new and existing tankers,

Bearing in mind Resolution 2 adopted by this Conference to implement the SOLAS Convention and the SOLAS Protocol as soon as possible and the effect of this extended application on the available manufacturing capacity and the essential need to ensure that every inert gas system is in compliance with the highest technical standards,

Recommends that the Inter-Governmental Maritime Consultative Organization promote studies with a view to re-examining the requirements relating to inert gas systems in Regulation 62 of Chapter II-2 of the SOLAS Convention and developing guidelines to supplement the requirements of that Regulation by taking account of the arduous operating conditions and the need to maintain these systems to a satisfactory standard.

RESOLUTION 6

PROCEDURES FOR THE EFFECTIVE ENFORCEMENT OF CONVENTIONS RELATING TO SAFETY OF LIFE AT SEA AND FOR THE PREVENTION OF POLLUTION FROM SHIPS

The Conference,

Recognizing the importance of making acceptable international instruments covering safety and the prevention of pollution, ensuring their rapid entry into force and their effective enforcement subsequently,

Noting with regard to prevention of pollution from ships that Resolution 1 adopted by the International Conference on Marine Pollution, 1973, urged Governments to accept the 1969 Amendments⁶ to the International Convention for the Prevention of Pollution of the Sea by Oil, 1954,⁷ as a matter of urgency,

Noting also with satisfaction that the aforementioned Amendments came into force on 20 January 1978,

⁶ United Nations, Treaty Series, vol. 1140, p. 340.

⁷ Ibid., vol. 327, p. 3.

Being aware that Resolution A.391(X) adopted by the Assembly of the Inter-Governmental Maritime Consultative Organization on 14 November 1977,⁸ set out guidelines for the enforcement of the aforementioned Convention as amended,

Noting further that Resolution A.321(IX) adopted by the Assembly of the Organization on 12 November 1975⁹ setting out procedures for the control of ships in respect of the International Convention for the Safety of Life at Sea, 1960,¹⁰ and the International Convention on Load Lines, 1966,¹¹

Urges Governments to implement the above-mentioned procedures and guidelines in order to ensure that the standards of safety on ships and those concerning the prevention of pollution from ships are fully complied with, Invites the Organization to develop further these procedures and guidelines, as appropriate, as new standards contained in conventions and protocols relating to safety and prevention of pollution come into force.

RESOLUTION 7

DEVELOPMENT OF GUIDELINES FOR THE PERFORMANCE OF IN PORT INSPECTIONS OF THE RESULT OF CARGO TANK CLEANING USING CRUDE OIL WASHING

The Conference,

Noting that Regulations 13 and 13B of Annex I of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973, (MARPOL Protocol) adopted by this Conference contain new requirements for a cargo tank cleaning procedure using crude oil washing,

Recognizing that in order to implement these requirements effectively continuing strong emphasis should be placed on the effective operation of crude oil washing procedures with a view to achieving the ultimate objective of complete elimination of pollution from ships,

Recognizing also that uniform guidelines for the extent and particulars of in port inspections of the results of cargo tank cleaning are a prerequisite for ensuring compliance of crude oil tankers using crude oil washing systems at all times with the provisions of the MARPOL Protocol,

Recommends that the Inter-Governmental Maritime Consultative Organization take urgent action to develop such guidelines which should be implemented by Governments as soon as they are adopted by the Organization.

⁸ Resolutions and other Decisions, International Governmental Maritime Consultative Organization Assembly, Tenth Session, 7-17 November 1977, p. 208.

⁹ Ibid., Ninth Session, 3-14 November 1975, p. 26.

¹⁰ United Nations, Treaty Series, vol. 536, p. 27.

¹¹ Ibid., vol. 640, p. 133.

RESOLUTION 8

IMPROVEMENT OF THE STANDARDS OF CREWS ON TANKERS

The Conference,

Having adopted the Protocols of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973, and the International Convention for the Safety of Life at Sea, 1974, which contain more stringent requirements for the design, equipment, inspection and certification of ships, particularly tankers,

Noting that an international conference will shortly be held on training and certification of seafarers with the intention of concluding a convention thereon,

Bearing in mind that the human factor is of critical importance with regard to the safe operation of ships,

Recognizing therefore that the full advantage of complex and advanced design and equipment of tankers with regard to safety of life at sea and protection of the marine environment can only be obtained if at the same time requirements are introduced on adequate training and certification of crews on tankers, Invites the Inter-Governmental Maritime Consultative Organization to bring to the attention of the 1978 International Conference on Training and Certification of Seafarers the need for the adoption of provisions in an international convention for adequate training and certification of crews on tankers.

RESOLUTION 9

PROTECTION OF PARTICULARLY SENSITIVE SEA AREAS

The Conference,

Noting with appreciation the work being carried out by the Inter-Governmental Maritime Consultative Organization concerning the protection of the marine environment against pollution from ships and from dumping of wastes,

Noting further the action taken by the International Conference on Marine Pollution, 1973, to include in the International Convention for the Prevention of Pollution from Ships, 1973, (MARPOL Convention) special mandatory provisions to prevent pollution of the sea in certain defined special areas, including the Mediterranean Sea area, the Baltic Sea area, the Black Sea area, the Red Sea area and the "Gulfs" area, because of their particular oceanographic characteristics and ecological significance,

Noting also that, under Article VIII of the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972¹² (the London Dumping Convention), Contracting Parties with common interests to protect in the marine environment in a given geographical area shall endeavour, taking into account characteristic regional features, to enter into regional agreements consistent with that Convention for the prevention of pollution, especially by dumping,

Being aware of continuing activities in special regions including the Mediterranean Sea, the Red Sea, the "Gulfs" area, the Gulf of Guinea, the Caribbean and South East Asian Waters, within the United Nations system under the co-ordination of the United Nations Environment Programme and with the participation of IMCO,

Being aware also of the need for measures aiming at the protection of particularly sensitive sea areas against pollution from ships and dumping of wastes,

¹² United Nations, Treaty Series, vol. 1046, p. 120.

Realizing that this need cannot be met without special studies undertaken as a matter of priority,

Recognizing the competence of the Organization in the field of the prevention and control of marine pollution from ships and dumping of wastes, and the competence of other international organizations in the field of the marine environment,

Invites the Organization:

- (a) To pursue its efforts in respect of the protection of the marine environment against pollution from ships and dumping of wastes;
- (b) To initiate, as a matter of priority and in addition to the work under way, studies, in collaboration with other relevant international organizations and expert bodies, with a view to:
 - (i) Making an inventory of sea areas around the world which are in special need of protection against marine pollution from ships and dumping, on account of the areas' particular sensitivity in respect of their renewable natural resources or in respect of their importance for scientific purposes;
 - (ii) Assessing, inasmuch as possible, the extent of the need of protection, as well as the measures which might be considered appropriate, in order to achieve a reasonable degree of protection, taking into account also other legitimate uses of the seas;
- (c) To consider, on the basis of the studies carried out accordingly and the results of other work undertaken, what action will be needed in order to enhance the protection of the marine environment from pollution from ships and dumping of wastes;
- (d) To take action, when appropriate, in accordance with the established procedure, with a view to incorporating any necessary provisions, within the framework of relevant conventions, as may be identified as a result of the above studies;
- (e) To formulate a recommendation to the Consultative Meeting of Contracting Parties that appropriate steps be taken within the framework of the London Dumping Convention, to protect such particularly sensitive sea areas from pollution caused by dumping.

RESOLUTION 10
DEVELOPMENT OF GUIDELINES FOR THE PERFORMANCE OF STATUTORY SURVEYS AND
INSPECTIONS, INCLUDING UNSCHEDULED INSPECTIONS AND MANDATORY ANNUAL
SURVEYS OF SHIPS

The Conference,

Noting that the Protocols of 1978 relating to the International Convention for the Safety of Life at Sea, 1974, (SOLAS Protocol) and to the International Convention for the Prevention of Pollution from Ships, 1973, (MARPOL Protocol) provide for modifications to the provisions relating to the intervals of surveys and inspections, and the introduction of unscheduled inspections and mandatory annual surveys conducted in lieu of unscheduled inspections of ships,

Realizing that the efficiency of such surveys and inspections depends on the national rules promulgated by Administrations to give effect to the provisions of the Conventions and Protocols,

Recognizing that uniform requirements for the extent and particulars of the surveys and inspections can make a valuable contribution to the cause of ensuring continual compliance of ships with the requirements of the Conventions and Protocols,

Recognizing also that at the present time there are a number of different periods of validity for the Certificates required by the SOLAS and MARPOL Conventions and the International Convention on Load Lines, 1966, as well as different intervals of intermediate surveys or inspections required by the said Conventions and Protocols and that it would be of advantage to standardize these periods and intervals,

Recommends that the Inter-Governmental Maritime Consultative Organization take early action to develop guidelines for Administrations as to the extent, particulars and frequency of such surveys and inspections of ships having due regard to their construction, machinery, equipment and age; these guidelines should also contain requirements for the frequency and scope of unscheduled inspections and the scope of mandatory annual surveys conducted in lieu of unscheduled inspections,

Recommends also that in due course the Organization take the necessary action to amend the appropriate instruments with a view to standardizing the periods of validity of the Certificates as well as the intervals of intermediate surveys and inspections required by the above-mentioned Conventions and Protocols.

RESOLUTION 11 MARINE SAFETY CORPS

The Conference,

Noting the importance of all Administrations exercising effectively their responsibilities for formulating regulations and causing surveys and inspections of ships to be undertaken in accordance with international conventions relating to maritime safety and the prevention of pollution from ships,

Recognizing that certain Administrations have inadequate reserves of skilled and experienced personnel to undertake such work as fully and frequently as desirable and that the Inter-Governmental Maritime Consultative Organization may be able to help them to develop such reserves by providing appropriate skilled advice and assistance, on request and through the available technical assistance programmes,

Requests the Organization to formulate arrangements for making such advice and assistance available by the establishment and utilization of a Marine Safety Corps of experts whose services may be made available by Governments willing to provide such assistance,

Requests the Secretary-General of the Organization to make such arrangements widely known among Member States, to arrange to make these experts available to Governments in response to their requests for such assistance, through the available technical assistance programmes, and to report on these operations to the Maritime Safety Committee or the Marine Environment Protection Committee of the Organization, as appropriate.

RESOLUTION 12 IMPROVED STEERING GEAR STANDARDS

The Conference, Having adopted the Protocol of 1978 relating to the International Convention for the Safety of Life at Sea, 1974, (SOLAS Protocol),

Noting that substantive changes to the technical provisions of the 1974 Convention concerning improved steering gear standards incorporated in that Protocol will apply only to tankers of 10,000 tons gross tonnage and upwards,

Noting also that Resolution A.325(IX) adopted by the Assembly of the Inter-Governmental Maritime Consultative Organization¹³, which deals, inter alia, with improved steering arrangements for new ships of various tonnages, is in the form of a recommendation only,

Recognizing the need to consider the application of the improved steering gear standards in the SOLAS Protocol and in the above-mentioned Resolution to all new ships,

Requests the Organization as a matter of urgency:

- (a) To redraft the steering gear standards for passenger and cargo ships as contained in Resolution A.325(IX), taking into account the provisions of the SOLAS Protocol;
- (b) To study the need for making the steering gear standards, which are applicable to tankers only in the SOLAS Protocol, applicable also to ships other than tankers; and
- (c) To consider the adoption of improved steering gear standards, together with other provisions for machinery and electrical installations in Resolution A.325(IX), as amendments to Chapter II-1 of the International Convention for the Safety of Life at Sea, 1974, upon its entry into force.

RESOLUTION 13 CARRIAGE OF COLLISION AVOIDANCE AIDS

The Conference,

Recognizing that the proper use of collision avoidance aids will assist the interpretation of radar data and could reduce the risk of collision and pollution of the marine environment,

Bearing in mind that collision avoidance aids with inadequate operational performance standards or operated by insufficiently trained personnel might prejudice safety of navigation,

Considering the need to prepare requirements for the carriage of such aids on all ships of 10,000 tons gross tonnage and upwards,

Considering also that the preparation of performance standards is a prerequisite for such requirements,

Invites the Inter-Governmental Maritime Consultative Organization:

- (a) To develop performance standards for collision avoidance aids as a matter of urgency and not later than 1 July 1979;
- (b) To prepare, within the same period, requirements for the carriage of such aids on all ships of 10,000 tons gross tonnage and upwards so that Chapter V of the International Convention for the Safety of Life at Sea, 1974, can be amended at the earliest practicable time; and
- (c) To invite the attention of the 1978 International Conference on Training and Certification of Seafarers to the need for including appropriate provisions concerning the use of collision avoidance aids in an international convention on training and certification of seafarers.

RESOLUTION 14 SPECIFICATIONS FOR OIL TANKERS WITH DEDICATED CLEAN BALLAST TANKS

¹³ Resolutions and other Decisions, International Governmental Maritime Consultative Organization Assembly, Ninth Session, 3-14 November 1975, p. 36.

The Conference,

Having adopted the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973, (MARPOL Protocol) which contains new and more stringent requirements for the design, equipment and operation of new and existing oil tankers,

Noting Regulation 13 of Annex I of the MARPOL Protocol which requires certain oil tankers to operate with dedicated clean ballast tanks,

Noting further that under Regulation 13A(2) of Annex I of the MARPOL Protocol requirements for arrangements and operational procedures for dedicated clean ballast tanks shall contain at least all the provisions of the Specifications adopted by the Conference,

Adopts the Specifications for Oil Tankers with Dedicated Clean Ballast Tanks, the text of which is set out in the Annex to this Resolution,

Recognizes that further improvement may be required in the Specifications,

Requests the Inter-Governmental Maritime Consultative Organization to review and revise, as necessary, those Specifications.

ANNEX

SPECIFICATIONS FOR OIL TANKERS WITH DEDICATED CLEAN BALLAST TANKS

1. Purpose

The purpose of these Specifications is to define:

- (a) The proper on board arrangements; and
- (b) The operational procedures for the dedicated clean ballast tanks (CET) concept. These Specifications are intended to be used by ship owners when developing and by Administrations when approving detailed arrangements and procedures for each individual tanker.

2. Application

These Specifications apply to oil tankers intended to be operated under the CBT concept in accordance with Regulation 13A of Annex I of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973, (MARPOL Protocol).

3. On board arrangements

The selection of tanks dedicated solely to the carriage of clean ballast and the pumping and piping arrangements shall be developed by the ship owner and be approved and certified by the Administration on the basis of these Specifications.

3.1. Selection of tanks

The selection of clean ballast tanks shall be made to achieve the best overall result from operational and pollution prevention points of view, having regard to the following aspects:

- (a) Tanks shall be so selected as to provide adequate capacity to enable the tanker to meet the requirements of Regulation 13(2) and (3) of Annex I of the MARPOL Protocol.
- (b) Hull stress must be within acceptable limits in the resulting ballast and loaded conditions.
- (c) Tanks shall be so selected as to require a minimum of involvement of the cargo piping and pumping system.
- (d) While wing tanks are preferable from the damage protection point of view for carriage of clean ballast, centre tanks are acceptable if they offer a significantly better overall arrangement with regard to tank volume and piping arrangements.
- (e) If a slop tank is not included in the original tank arrangement, a tank of sufficient capacity shall be designated as the slop tank to receive the pipe flushing water.

3.2. Pumping and piping

In the overall arrangement the following points should also be kept in mind:

- (a) All ballast tanks should, whenever possible, be served by a single pump with a minimum of piping involved, in order to reduce the risk of contamination.
- (b) The piping system required for ballast handling should be so arranged as to flush without depositing oily water in the clean ballast tanks. Flushing may be done from a sea chest through the piping to a slop tank or from the clean ballast tanks to the slop tank. If separate ballast lines are used, these lines need not be flushed.
- (c) "Dead end" pipe sections should be avoided as far as possible but where necessary means shall be provided to drain such sections by connexion to a stripping device.
- (d) Double valve separation of ballast and cargo spaces should always be maintained during the voyage and to the maximum extent possible during cargo and ballast operations.
- (e) When an oil content meter is installed as required by Regulation 13A(3) of Annex I of the MARPOL Protocol, sampling points should be arranged to enable sampling of all discharges of clean ballast water, as well as regular load on top (LOT) discharges. When possible a sampling point should be arranged to enable sampling of the pipe flushing water routed to the slop tank.

4. Operational Procedures

A Clean Ballast Tank Operation Manual, which includes a check list, shall be developed by the shipowner for each individual tanker and shall be approved by the Administration on the basis of these Specifications.

4.1. In loading port

Prior to the tanker's arrival at loading port, the clean ballast quantity may be reduced to berthing condition, using a pipe that has been cleaned during the ballast voyage. A CBT tanker is never loaded to its full cargo carrying capacity, and is normally capable of carrying a full cargo together

with the normal quantity of port ballast, i.e. quantity of clean ballast for arrival purposes. This enables the tanker to operate, draught permitting, without handling any ballast water in port.

After any discharge of clean ballast in port the affected pipe system should be drained, and all valves to clean ballast tanks should be closed. If the pipe flushing procedure requires water to be available in the ballast tanks, the proper quantity is left in these tanks before they are closed off from the piping system. Thereafter, the piping system is used for normal cargo loading operations.

4.2. Loaded voyage

During the voyage in loaded condition pump and pipe flushing is carried out. Any resulting oily mixtures are to be settled in a slop tank. Overboard discharges from the slop tank are to be controlled in accordance with the requirements of the MARPOL Protocol.

When convenient after departure, the pumping and piping system to be used for clean ballast handling is flushed to a slop tank. The quantity of flushing water available should be at least 10 times the affected pipe volume. If ballast in excess of the necessary flushing water quantity is retained on board during loading, the remaining quantity can be discharged overboard using the clean piping.

When an oil content meter is installed in accordance with the requirements of Regulation 13A(3) of Annex I of the MARPOL Protocol, all discharges shall be monitored by this equipment. Where possible, the oil content in the pipe flushing water shall also be monitored to assist in controlling the efficiency of the flushing and for the detection of any abnormalities in the operation.

4.3. In unloading port

Prior to berthing in an unloading port, a quantity of clean ballast, adequate for flushing the piping designated for handling clean ballast, shall be taken on board through that piping which has remained clean throughout the voyage. If port draught limitations permit, it is recommended that more ballast be taken on board within the deadweight limit, up to the normal quantity for departure condition, thereby eliminating the need for further handling of ballast during the unloading. If it is expected that further ballasting during the unloading is necessary, the required pump and pipe section is initially left clean. The desired ballast is taken on as soon as draught conditions permit, whereupon the unloading can continue with all pumps available.

Upon completion of the unloading or at departure, the pump and piping are flushed to the slop tank, followed by ballasting of the clean ballast tanks to normal sea conditions.

4.4. Ballast voyage

During the ballast voyage the pumping and piping system used for handling clean ballast shall be kept clean and, after any handling of oily water, be reflushed as necessary in preparation for ballast handling in the loading port. Overboard discharges from the slop tank are to be controlled in accordance with the requirements of the MARPOL Protocol.

4.5. Check list

The approved operational procedures should be supplemented by a check list. The list in the Appendix to these Specifications applies generally to all tankers operating under the CBT concept. When the check list for a specific tanker is prepared, it should be expanded to include any other step of relevance and be completed with appropriate identification of pumps, valves, etc.

5. Survey and certification

- 5.1 Every oil tanker intended to be operated with dedicated clean ballast tanks in accordance with Regulation 13A of Annex I of the MARPOL Protocol, shall be subject to the survey required by Regulation 4 of Annex I of that Protocol.
- 5.2 Such survey should be made prior to the date of entry into force of the MARPOL Protocol in order to enable issue of the International Oil Pollution Prevention Certificate before compliance with the MARPOL Protocol requirements becomes mandatory.
- 5.3 The survey shall include the verifications of the appropriateness of:
 - The selection of ballast tanks and pumping and piping arrangements, in accordance with Section 3 above;
 - The CBT Operation Manual, i.e. the detailed operational procedures including check list, in accordance with Section 4 above.
- 5.4 Upon approval in the respects mentioned in Sections 5.1 and 5.3 above, the International Oil Pollution Prevention Certificate shall be issued by the Administration. The Certificate shall indicate which tanks are approved solely for the carriage of dedicated clean ballast. It shall also state that the master has been supplied with information concerning approved operational procedures (CBT Operation Manual).
- 5.5 Alterations to a CBT tanker which affect its capability to be operated under the CBT concept require the approval of the Administration and shall be reflected in the International Oil Pollution Prevention Certificate and, if appropriate, in the CBT Operation Manual.

6. Documents

The International Oil Pollution Prevention Certificate and the CBT Operation Manual shall at all times be available on board the tanker.

Appendix CBT Operational Procedures-Check List

I. Prior to arrival at the loading port

1. Transfer all remaining slop to a cargo tank.
2. Ensure that the pumping and piping designated for clean ballast operation have been properly cleaned to accommodate simultaneous discharge of clean ballast while loading.
3. Ensure that all valves to the slop tank and the cargo tanks are closed.
4. Perform visual inspection of all clean ballast tanks and their contents, if any, for signs of contamination.
5. Discharge a sufficient amount of clean ballast water to ensure that remaining ballast water and cargo to be loaded will not exceed the permissible deadweight or draught. Leave a sufficient amount of water for flushing the piping, and as a minimum, a quantity equal to 10 times the volume of the affected piping.
6. Ensure that all valves to the clean ballast tanks are closed.

7. If no further ballast discharge is anticipated, drain the clean ballast piping.

II. In the loading port

1. Perform normal loading operations of cargo tanks.
2. Ensure sufficient slop tank capacity is available for subsequent reception of cargo pump and pipe flushings.
3. When applicable, discharge remaining clean ballast before entire piping system is used for loading. Leave the required minimum quantity of flushing water in ballast tanks.
4. Ensure that all valves to the clean ballast tanks are closed.
5. Ensure that all valves to the cargo tanks are closed upon completion of loading.

III. After departure from the loading port

1. Flush appropriate pumping and piping with sufficient water from clean ballast tanks into a slop tank.
2. Ensure that valves to the slop tank are closed before pumping the remaining clean water overboard and monitoring oil content of the water, either visually or by a content meter.
3. Ensure that all valves in the clean ballast tanks are closed.

IV. Prior to arrival at the unloading port

1. Ensure that all valves to the slop tank and the cargo tanks are closed.
2. Recheck that the pumping and piping designated for clean ballast operation have been properly cleaned.
3. Ballast as required through clean cargo pumps and pipes, considering port draught requirements.
4. Ensure that all valves in the clean ballast tanks are closed.

V. In the unloading port

1. Allocate pumping and piping intended for clean ballast operation.
2. Perform normal unloading operations.
3. As soon as draught conditions permit, complete ballasting as required to departure condition.
4. Ensure that all valves to the clean ballast tanks are closed.
5. Complete unloading.

VI. After departure from the unloading port

1. Flush pumping and piping serving the clean ballast tanks into the slop tank.

2. Top up clean ballast tanks as required.
3. Process the slop tank content in accordance with LOT procedures.

RESOLUTION 15
SPECIFICATIONS FOR THE DESIGN, OPERATION AND CONTROL OF CRUDE OIL WASHING SYSTEMS

The Conference,

Having adopted the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973, (MARPOL Protocol) which contains new and more stringent requirements for the design, equipment and operation of new and existing oil tankers,

Noting Regulation 13 of Annex I of the MARPOL Protocol which requires certain oil tankers to operate with a cargo tank cleaning procedure using crude oil washing,

Noting further that under Regulation 13B(2) of Annex I of the MARPOL Protocol the requirements for the crude oil washing installation and associated equipment and arrangements shall contain at least all the provisions of the Specifications adopted by the Conference,

Adopts the Specifications for the Design, Operation and Control of Crude Oil Washing Systems, the text of which is set out in the Annex to this Resolution,

Recognizes that further improvement may be required in the Specifications, taking into account the development of technology in this field and in the light of experience gained,

Requests the Inter-Governmental Maritime Consultative Organization to review and revise, as necessary, the Specifications in order that the revised Specifications reflect the latest technology and practices as may be developed by the time of entry into force of the Protocol.

ANNEX
SPECIFICATIONS FOR THE DESIGN, OPERATION AND CONTROL OF CRUDE OIL WASHING SYSTEMS

1. Purpose

The purpose of these Specifications is to provide specific design criteria, operational requirements and control and enforcement procedures for the crude oil washing of cargo tanks of crude oil carriers as specified in Section 2.

2. Application

2.1 These Specifications apply to:

- (a) Existing crude oil tankers of 40,000 tons deadweight and above in accordance with Regulation 13(8) of Annex I of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973, (MARPOL Protocol); and
- (b) New crude oil tankers of 20,000 tons deadweight and above in accordance with Regulation 13(6) of Annex I of the MARPOL Protocol, with the changes listed in Appendix I.

Compliance of these ships with these Specifications shall be shown on the International Oil Pollution Prevention Certificate as modified by the MARPOL Protocol.

- 2.2 If a crude oil that is not suitable for crude oil washing is intended to be carried as cargo in a ship that is provided with only a crude oil washing system, then that ship must comply with segregated ballast tank requirements in accordance with Regulation 13(7) or dedicated clean ballast tank requirements in accordance with Regulation 13(9) of Annex I of the MARPOL Protocol.

3. General Provisions

3.1 Definition

For the purpose of these Specifications,

- 3.1.1 "Arrival ballast" means clean ballast as defined in Regulation 1(16) of Annex I of the MARPOL Protocol.

- 3.1.2 "Departure ballast" means ballast other than arrival ballast.

3.2 Initial survey

The initial survey referred to in Regulation 4 of Annex I of the MARPOL Protocol shall include a complete inspection of the crude oil washing equipment and arrangements and shall include, except for the cases specified in paragraph 4.2.11, an examination of the tanks after they have been crude oil washed and the additional controls as specified in paragraph 4.2.10 to ensure the washing system efficiency is in accordance with these Specifications.

4. Design Criteria

4.1 Piping

- 4.1.1 The crude oil washing pipes and all valves incorporated in the supply piping system shall be of steel or other equivalent material and shall be of adequate strength having regard to the pressure to which they may be subjected; and shall be properly jointed and supported.

- 4.1.2 The crude oil washing system shall consist of permanent pipework and shall be independent of the fire mains or any system other than for tank washing except that sections of the ship's cargo system may be incorporated into the crude oil washing system provided that they meet the requirements as applied to crude oil pipework. Notwithstanding the requirements of this paragraph, in combination carriers the arrangements should allow removal of the equipment, if necessary, when carrying non-liquid cargoes and be such that when reinstated the system is as originally fitted and tested for oil tightness.

- 4.1.3 Provision shall be made to prevent overpressure in the tank washing supply piping. Any relief device fitted to prevent overpressure shall discharge into the suction side of the supply pump. Alternative methods to the satisfaction of the Administration may be accepted provided an equivalent degree of safety and environmental protection is provided.

- 4.1.4 Where hydrant valves are fitted for water washing purposes on tank washing lines, all such valves shall be of adequate strength and provisions made for such connexions to be blanked off when washing lines may contain crude oil.
- 4.1.5 All connexions for pressure gauges or other instrumentation shall be provided with isolating valves adjacent to the lines or the fitting shall be of the sealed type.
- 4.1.6 No part of the crude oil washing system shall enter the machinery spaces. Where the tank washing system is fitted with a steam heater for use when water washing, the heater must be effectively isolated during crude oil washing by double shut-off valves or by clearly identifiable blanks.
- 4.1.7 Where a combined crude oil-water washing supply piping is provided the piping shall be so designed that it can be drained so far as is practicable of crude oil, before water washing is commenced, into spaces designated in the Operations and Equipment Manual. These spaces may be the slop tank or other cargo spaces.
- 4.1.8 The piping system shall be of such a diameter that the greatest number of tank cleaning machines required, as specified in the Operations and Equipment Manual, can be operated simultaneously at the designed pressure and throughput. The arrangement of the piping shall be such that the required number of tank cleaning machines to each cargo compartment as specified in the Operations and Equipment Manual referred to in these Specifications can be operated simultaneously.
- 4.1.9 The piping system shall be tested to one and one-half times the working pressure after it has been installed on the ship.
- 4.1.10 The crude oil washing supply piping shall be anchored (firmly attached) to the ship's structure at appropriate locations, and means shall be provided to permit freedom of movement elsewhere to accommodate thermal expansion and flexing of the ship. The anchoring shall be such that any hydraulic shock can be absorbed without undue movement of the supply piping. The anchors should normally be situated at the ends furthest from the entry of the crude oil supply to the supply piping. If tank washing machines are used to anchor the ends of branch pipes then special arrangements are necessary to anchor these sections when the machines are removed for any reason.

4.2 Tank washing machines

- 4.2.1 The tank washing machines for crude oil washing shall be permanently mounted and shall be of a design acceptable to the Administration.
- 4.2.2 The performance characteristic of a tank washing machine is governed by nozzle diameter, working pressure and the movement pattern and timing. Each tank cleaning machine fitted shall have a characteristic such that the sections of the cargo tank covered by that machine will be effectively cleaned within the time specified in the Operations and Equipment Manual.
- 4.2.3 Tank washing machines shall be mounted in each cargo tank and the method of support shall be to the satisfaction of the Administration. Where the tank machines are positioned well below the deck level to cater for protuberances in the tank consideration may need to be given to additional support for the machine and its supply piping.
- 4.2.4 Each machine shall be capable of being isolated by means of stop valves in the supply line. If a deck mounted tank washing machine is removed for any reason provision shall be made to blank off the oil supply line to the machine for the period the machine is removed. Similarly provision shall be made to close the tank opening with a plate or equivalent means.
- 4.2.5 Where the drive units for the tank cleaning machines are not integral with the tank cleaning machine sufficient drive units shall be provided to ensure that no drive unit need be moved more than twice from its original position during cargo discharge to accomplish the washing programme as specified in the Operations and Equipment Manual.
- 4.2.6 The number and location of the tank washing machines shall be to the satisfaction of the Administration.
- 4.2.7 The location of the machines is dependent upon the characteristics detailed in paragraph 4.2.2 and upon the configuration of the internal structure of the tank.
- 4.2.8 The number and location of the machines shall be such that all horizontal and vertical areas are washed by direct impingement or effectively by deflection or splashing of the impinging jet. In assessing an acceptable degree of jet deflection and splashing, particular attention shall be paid to the washing of upward facing horizontal areas and the following parameters shall be used:
 - (i) For horizontal areas of a tank bottom and the upper surfaces of a tank's stringers and other large primary structural members, the total area shielded from direct impingement by deck or bottom transverses, main girders, stringers or similar large primary structural members shall not exceed 10 per cent of the total horizontal area of tank bottom, the upper surface of stringers, and other large primary structural members.
 - (ii) For vertical areas of the sides of a tank, the total area of the tank's sides shielded from direct impingement by deck or bottom transverses, main girders, stringers or similar large primary structural members shall not exceed 15 per cent of the total area of the tank's sides.

In some installations it may be necessary to consider the fitting of more than one type of tank washing machine in order to effect adequate coverage.

4.2.9 At the design stage the following minimum procedures shall be used to determine the area of the tank surface covered by direct impingement:

- (i) Using suitable structural plans, lines are set out from the tips of each machine to those parts of the tank within the range of the jets.
- (ii) Where the configuration of the tanks is considered by the Administration to be complicated, a pinpoint of light simulating the tip of the tank washing machine in a scale model of the tank shall be used.

4.2.10 (i) To confirm the cleanliness of the tank and to verify the design in respect of the number and location of the tank washing machines a visual inspection shall be made by entry to the tanks after a crude oil wash but prior to any water rinse which may be specified in the Operations and Equipment Manual. The bottom of the tank to be inspected may, however, be flushed with water and stripped in order to remove any heel of crude oil before gas freeing for entry. This inspection shall ensure that the tank is essentially free of oil clingage and deposits. If the flushing procedure is adopted, a similar but unflushed tank must be used for the test specified in sub-paragraph (ii) below.

(ii) To verify the effectiveness of the stripping and drainage arrangements a measurement shall be made of the amount of oil floating on top of the departure ballast. The ratio of the volume of oil on top of the total departure ballast water to the volume of tanks that contain this water shall not exceed 0.00085. This test shall be carried out after crude oil washing and stripping in a tank similar in all relevant respects to the tank examined in accordance with sub-paragraph (i), which has not been subjected to a water rinse nor to the intervening water flushing permissible in sub-paragraph (i) above.

(iii) The arrival ballast after a typical ballast voyage before which the arrival ballast tanks have been crude oil washed and during which the tanks have been water rinsed in accordance with the programme set out in the Operations and Equipment Manual shall be totally discharged to the loading port harbour through an oil discharge monitoring and control system approved by the Administration, and the oil content of the effluent shall not exceed 15 ppm.

4.2.11 Where an Administration is satisfied that ships are similar in all relevant respects, the requirements of paragraph 4.2.10 need only be applied to one such ship. Furthermore where a ship has a series of tanks that are similar in all relevant respects then, for that series of tanks, the requirements of sub-paragraph 4.2.10(i) need only be applied to one tank of that series.

4.2.12 The design of the deck-mounted tank washing machines shall be such that means are provided external to the cargo tanks which when crude oil washing would indicate the rotation and arc of the movement of the machine.

4.2.13 Where submerged machines are required they should be non-programmable and in order to comply with the requirements of paragraph 4.2.8 it must be

possible to verify their rotation either by indicators external to the tank or by checking their characteristic sound pattern. Where verification by sound pattern is the only method of checking the operation of bottom machines, then the operation of those machines shall be verified towards the end of each wash cycle. The method of verification by sound pattern shall be specified in the Operations and Equipment Manual.

4.3 Pumps

- 4.3.1 The pumps supplying crude oil to the tank cleaning machines shall be either the cargo pumps or pumps specifically provided for the purpose.
- 4.3.2 The capacity of the pumps shall be sufficient to provide the necessary through put at the required pressure for the maximum number of tank cleaning machines required to be operated simultaneously as specified in the Operations and Equipment Manual. In addition to the above requirement the pumps shall, if an eductor system is fitted for tank stripping, be capable of supplying the eductor driving fluid to meet the requirements of paragraph 4.4.2.
- 4.3.3 The capacity of the pumps shall be such that the requirements of paragraph 4.3.2 can be met with any one pump inoperative. The pumping and piping arrangements shall be such that the crude oil washing system can be effectively operated with any one pump out of use.
- 4.3.4 The carriage of more than one grade of cargo shall not prevent crude oil washing of tanks.
- 4.3.5 To permit crude oil washing to be effectively carried out where the back pressure presented by the shore terminal is below the pressure required for crude oil washing, provision shall be made such that an adequate pressure to the washing machines can be maintained in accordance with paragraph 4.3.2. This requirement shall be met with any one cargo pump out of action. The minimum supply pressure required for crude oil washing shall be specified in the Operations and Equipment Manual. Should this minimum supply pressure not be obtainable crude oil washing operations shall not be carried out.

4.4 Stripping system

- 4.4.1 The design of the system for stripping crude oil from the bottom of every cargo tank shall be to the satisfaction of the Administration.
- 4.4.2 The design and capacity of the tank stripping system shall be such that the bottom of the tank being cleaned is kept free of accumulations of oil and sediment towards completion of the tank washing process.
- 4.4.3 The stripping system shall be capable of removing oil at a rate of 1.25 times the total throughput of all the tank cleaning machines to be operated simultaneously when washing the bottom of the cargo tank(s) as described in the ship's Operation and Equipment Manual.
- 4.4.4 Means such as level gauges, hand dipping, and stripping system performance gauges as referred to in paragraph 4.4.8 shall be provided for checking that the bottoms of cargo tanks are dry after the crude oil washing. Suitable

arrangements for hand dipping must be provided at the aftermost portion of a cargo tank and in three other suitable locations. For the purpose of this paragraph "dry" means a small quantity of oil near the stripping suction with the tank dry everywhere else.

- 4.4.5 Means shall be provided to drain all cargo pumps and lines at the completion of cargo discharge, where necessary by connexion to a stripping device. The line and pump drainings shall be capable of being discharged both to a cargo tank and ashore. For discharge ashore a special small diameter line shall be provided for that purpose and connected outboard of the ship's manifold valves.
- 4.4.6 The means for stripping oil from the cargo tanks shall be by positive displacement pump, self-priming centrifugal pump or eductor or other methods to the satisfaction of the Administration. Where a stripping line is connected to a number of tanks means shall be provided for isolating each tank not being stripped at that particular time.
- 4.4.7 The carriage of more than one grade of cargo shall not prevent crude oil washing of tanks.
- 4.4.8 Equipment shall be provided for monitoring the efficiency of the stripping system. All such equipment shall have remote read out facilities in the cargo control room or in some other safe and convenient place easily accessible to the officer in charge of cargo and operations. Where a stripping pump is provided the monitoring equipment shall include either a flow indicator, or a stroke counter or revolution counter as appropriate, and pressure gauges at the inlet and discharge connexions of the pump or equivalent. Where eductors are provided the monitoring equipment shall include pressure gauges at the driving fluid intake and at the discharge and a pressure/vacuum gauge at the suction intake.
- 4.4.9 The internal structure of the tank shall be such that drainage of oil to the tank suctions of the stripping system is adequate to meet the requirements of paragraphs 4.4.2 and 4.4.4. Care shall be taken that both longitudinal and transverse drainage are satisfactory and shall be verified during the inspection required by paragraphs 3.2 and 4.2.10.
- 4.4.10 The trim conditions for crude oil washing given in the Operations and Equipment Manual shall be adhered to. In general, trim by the stern is only important during the final stages of tank discharge and shall be the maximum possible compatible with operational constraints but in no case less than that recorded during the crude oil washing prior to the inspection required by paragraphs 3.2 and 4.2.10.
- 4.4.11 The stripping lines and associated fittings shall be in accordance with the requirements of paragraph 4.1.1.

4.5 Ballast lines

- 4.5.1 Where a separate ballast water system for ballasting cargo tanks is not provided the arrangement shall be such that the cargo pump, manifolds and pipes used for ballasting can be safely and effectively drained of oil before ballasting.

5. Qualification of Personnel

- 5.1 The training requirements of ships' personnel engaged in the crude oil washing of tankers shall be to the satisfaction of the Administration.

- 5.2 Where a person such as the Master, the Chief Officer or the Cargo Control Officer assumes overall charge of a crude oil wash he shall:

- (i) Have at least one year's experience on oil tankers where his duties have included the discharge of cargo and associated crude [oil] washing. Where his duties have not included crude oil washing operations, he shall have completed a training programme in crude oil washing in accordance with Appendix II to these Specifications and satisfactory to the Administration;
- (ii) Have participated at least twice in crude oil wash programmes one of which shall be in the particular ship for which he is required to undertake the responsibility of cargo discharge. Alternatively this latter participation may be acceptable if undertaken on a ship that is similar in all relevant respects; and
- (iii) Be fully knowledgeable of the contents of the Operations and Equipment Manual.

- 5.3 Where other nominated persons are intended to have particular responsibilities as defined in the Operations and Equipment Manual they shall have at least 6 months' experience on oil tankers where in the course of their duties they should have been involved in the cargo discharge operation. In addition they should have been instructed in the crude oil washing operation in the particular ship for which they are required to undertake this responsibility and be fully knowledgeable of the contents of the Operations and Equipment Manual. Appendix II to these Specifications should be used as guidance in establishing the content of such instruction.

6. Operation

6.1 Tankage to be crude oil washed

Before departure on a ballast voyage, after the complete discharge of cargo, sufficient tanks shall have been crude oil washed, in accordance with the procedures specified in the Operations and Equipment Manual to ensure that:

- (i) As a minimum, sufficient tanks have been washed to permit compliance with the draught and trim requirements of Regulation 13(2)(a), (b) and (c) of Annex I of the MARPOL Protocol during all phases of the ballast voyage; and
- (ii) Account is taken of the ship's trading pattern and the expected weather conditions so that additional ballast water is not put into tanks which have not been crude oil washed.

In addition to the tanks referred to in sub-paragraph (i) above, approximately one-quarter of all remaining tanks shall be crude oil washed for sludge control, but these additional tanks may include the tanks referred to in sub-paragraph (ii) above. However for sludge control purposes, no tank need be crude oil washed more than once in every four months. Crude oil washing shall not be conducted between the final discharge and loading ports; that is to say no crude oil washing shall be undertaken during the ballast voyage. Ballast water shall not be put into tanks that have not been crude oil washed. Water that is put into a tank which has been crude oil washed but not water rinsed shall be regarded as dirty ballast.

6.2 Drainage and discharge ashore of cargo lines

At the end of cargo discharge all cargo main and stripping lines shall be drained and stripped and the drainings and strippings passed to the shore via the special small diameter line required by paragraph 4.4.5.

6.3 Filling of departure ballast tanks

Care shall be taken at the completion of crude oil washing of any departure ballast tank to strip the tank as completely as possible. Where departure ballast is filled through cargo lines and pumps, these must be drained and stripped of oil using the means required by paragraph 4.4.5 before ballast is loaded.

6.4 Crude oil washing at sea

All crude oil washing must be completed before the ship leaves its final port of discharge. Where any tank is crude oil washed whilst the ship is at sea between multiple discharge ports, the tank shall be left empty and available for inspection at the next discharge port before commencing the next ballast voyage. This inspection may consist of multiple sounding/dipping of the bottom of the tank when the tank is empty. Departure ballast tanks shall be ballasted prior to departure from port so that examination of the surface of the ballast water can be made. In the latter case the guidance given in subparagraph 4.2.10(ii) is relevant to the inspection.

6.5 Discharge of oily water effluents on ballast voyage

The discharge of departure ballast and any other water effluent discharged during the ballast voyage shall comply with the requirements of Regulation 9 of Annex I of the MARPOL Protocol.

6.6 Use and control of inert gas

On ships to which these Specifications apply, no tank shall be crude oil washed unless the inert gas system required by Regulation 13B(3) of Annex I of the MARPOL Protocol is in proper operation. Before each tank is crude oil washed, the oxygen level shall be determined at a point 1 metre from the deck and at the middle region of the ullage space and neither of these determination shall exceed 8 per cent by volume. Where tanks have complete or partial wash bulk-heads, the determinations should be taken from similar levels in each section of the tank. The oxygen level of the inert gas being delivered during the washing process shall be continuously monitored. If during crude oil washing:

- (i) The oxygen level of the inert gas being delivered exceeds 8 per cent by volume; or
- (ii) The pressure of the atmosphere at the tanks is no longer positive, then the washing must be stopped until satisfactory conditions are restored.

6.7 Precautions against electrostatic generation

To avoid excessive electrostatic generation in the washing process due to the presence of water in the crude oil washing fluid, the contents of any tank to be used as a source of crude oil washing fluid must first be discharged by at least 1 metre before being so used. Any tank used as a slop tank on the previous ballast voyage shall be completely discharged and refilled with dry crude if that tank is to be used as a source of washing fluid.

6.8 Vapour emission

On ships to which these Specifications apply there shall be means to avoid vapour emission during the filling of departure ballast wherever local conditions require it. The method of preventing the emission of hydrocarbon vapour into the atmosphere shall be:

- (a) By the use of permanent ballast tanks wherever these are sufficient to provide the minimum departure draught; or
- (b) By the containment in empty cargo tanks by the simultaneous ballasting and cargo discharge.

Alternative methods to the satisfaction of the Administrations may be accepted provided an equivalent degree of environmental protection is provided.

7. Operations and Equipment Manual

The Operations and Equipment Manual must be to the satisfaction of the Administration and shall contain the following information and operational instructions:

- 7.1 The complete text of the "Specifications for the Design, Operation and Control of Crude Oil Washing Systems".
- 7.2 A line drawing of the crude oil washing system showing the respective position of pumps, lines and washing machines which relate to the crude oil washing system.
- 7.3 A description of the system and a listing of procedures for checking that equipment is working properly during crude oil washing operations. This shall include a listing of the system and equipment parameters to be monitored, such as line pressure, oxygen level, machine revolutions, duration of cycles, etc. The established values for these parameters shall be included. The results of the tests carried out in accordance with paragraph 4.2.10 and the values of all parameters monitored during such tests shall also be included.
- 7.4 Details of the requirements of Section 6 of these Specifications together with advice and instructions, where appropriate, in meeting these requirements such as:
 - (i) Recommended methods and programmes of crude oil washing in order to accord with all foreseeable circumstances of cargo discharge restraints and to obtain maximum trim during the completion of washing and draining of each tank.
 - (ii) The procedure on ships to avoid vapour emission in accordance with paragraph 6.8.
 - (iii) The method of draining tanks which shall include information on optimum trim conditions as required by paragraph 4.4.10.
 - (iv) The method of draining cargo pumps, cargo lines, crude oil washing lines and stripping lines, and spaces into which they may be drained, together with the final discharge ashore via the small discharge line on completion of discharge.

- (v) Typical washing programmes under various conditions of loading specifying:
 - (1) The tanks to be washed in accordance with paragraph 6.1;
 - (2) The method for washing each tank, that is single or multi-stage;
 - (3) The number of tank washing machines to be used simultaneously;
 - (4) The duration of the crude oil wash and water rinse where the latter is appropriate;
 - (5) The volume of water used for water rinse, which shall be at least equal to that used in the water rinse prior to the inspection required by paragraphs 3.2 and 4.2.10; and
 - (6) The preferred order in which the tanks are to be washed.
 - (vi) The procedure for draining and stripping, where appropriate, cargo lines and pumps before being used for the loading of departure ballast.
 - (vii) The procedure for water washing lines before discharge of departure ballast and the loading and final discharge of arrival ballast.
 - (viii) The procedure for verifying by sound patterns that bottom mounted machines are operating shall be carried out towards the end of the wash cycle for each tank. When carrying out such verification all other machines shall be shut down as necessary.
 - (ix) Precise details of procedure to ensure compliance with Regulation 9 of Annex I of the MARPOL Protocol in the discharge of departure ballast, the water flushing of lines and the decanting of the slop tank(s) at sea.
- 7.5 The dangers of leakage from the crude oil washing system and the precautions necessary to prevent leakage and the action to be taken in the event of a leakage. Guidance shall be given on how the crude oil washing system is to be operationally tested for leakage before each discharge.
- 7.6 The method of preventing the entry of oil to the engine room through steam heaters as required by paragraph 4.1.6.
- 7.7 The personnel required at all times to conduct the dual operation of discharging cargo and crude oil washing. The numbers of such personnel shall include:
- (i) The person meeting the requirements of paragraph 5.2 who will have overall control of the crude oil washing process;
 - (ii) Those persons meeting the requirements of paragraph 5.3 who will be expected to undertake the actual operation; and
 - (iii) At least one person on deck at all times during washing to keep watch for leaks and malfunctioning of equipment, to test the oxygen content of tanks before washing, to check tank atmosphere pressure, to sound tank bottoms if required, to lift ullage floats if necessary and to change drive units when this is necessary.

The duties of such persons are not necessarily mutually exclusive.

7.8 An effective means of communication between the watchkeeper on deck and the cargo control position so that in the event of a leak in or malfunctioning of the crude oil washing system the washing may be stopped as soon as possible.

7.9 The typical procedures for ballasting.

7.10 A pre-crude oil wash operational checklist for the use of the crew at each discharge which shall include the checking and calibration of all instruments.

7.11 The recommended intervals for on board inspection and maintenance of crude oil washing equipment in addition to statutory surveys. Reference should be made to technical manuals supplied by the manufacturers of the equipment.

7.12 A list of crude oils unsuitable for the crude oil washing process and their origin.

Appendix I List of Changes when Applying the Specifications to New Crude Oil Tankers of 20,000 Tons Deadweight and Above

Paragraph number	List of changes
4.2.5	This paragraph is not applicable.
4.2.10	Sub-paragraph (iii) is not applicable.
6.1	Replace by the following:
6.1.1	Before departure on a ballast voyage:
	(i) Approximately one quarter of the cargo tanks shall be crude oil washed for sludge control purposes on a rotational basis and in accordance with the procedures specified in the Operations and Equipment Manual. However, for these purposes, no tank need be crude oil washed more than once in every four months; and
	(ii) If it is considered that additional ballast in a cargo tank or tanks may be required during the ballast voyage under the conditions and provisions specified in Regulation 13(3) Annex I of the MARPOL Protocol, the tank or tanks which may be used for this ballast shall be crude oil washed in accordance with the procedures specified in the Operations and Equipment Manual.
6.1.2	Ballast water shall not be put into cargo tanks that have not been crude oil washed. Water that is put into a tank which has been crude oil washed but not water rinsed shall be regarded as dirty ballast.
6.1.3	Crude oil washing shall not be conducted between the final discharge and loading ports; that is to say no crude oil washing shall be undertaken during the ballast voyage.
6.3	Replace by the following:
6.3	Filling of additional ballasting cargo tanks

Care shall be taken at the completion of crude oil washing of any cargo tank that might contain ballast to strip the tank as completely as possible. Where this ballast is filled through cargo lines and pumps, these must be drained and stripped of oil using the means required by paragraph 4.4.5.

6.4 The last two sentences are not applicable.

6.5 Replace by the following:

6.5 Discharge of oily water effluents on ballast voyage

The discharge of additional ballast from cargo tanks and any other water effluent discharged during the ballast voyage shall comply with the requirements of Regulation 9 of Annex I of the MARPOL Protocol.

6.8 This paragraph is not applicable.

7.4 This paragraph is not applicable.

Appendix II Training for Persons Intended to Assume Overall Charge of Crude Oil Washing

Introduction

Any required training shall be by supervised instruction, conducted in a shore-based facility or aboard a suitably equipped ship having training facilities and instructors for this purpose, dealing with the principles involved and the application of these principles to ship operation.

In drawing up an Administration-approved syllabus of training, the Specifications for the Design, Operation and Control of Crude Oil Washing Systems of tankers adopted by the Conference shall be taken into account.

Such training shall include but not necessarily be limited to:

(a) An introduction to the principles of crude oil washing which shall include:

- The characteristics of crude oil as a washing fluid and its contrast with water washing;
- Top washing;
- Bottom washing;
- Trim requirements;
- Methods of bleeding off from the cargo discharge;
- Maintenance of required washing fluid pressure;
- Washing at sea between discharge ports;
- Recirculatory washing;
- Relative priorities and requirements for the departure ballast tanks, arrival ballast tanks and cargo only tanks;

(b) Equipment and design

- (i) Location of washing machines;
- (ii) Washing machines, deck-mounted and submerged:
 - Types;
 - Characteristics;
 - Features of construction;
 - Operating parameters;
- (iii) Drive units;
- (iv) Washing fluid supply and distribution systems;
- (v) Stripping systems;
- (vi) Means of sounding tanks;
- (vii) Inert gas requirements.

(c) Generalized crude oil washing procedures

- (i) Traditional pipeline ship/free flow ship/partial free flow ship;
- (ii) Single/multi parcel cargoes;
- (iii) Optimization of procedure to wash with minimum extra berth time;
- (iv) Ballasting for departure with various ship and pipeline configurations;
- (v) Procedure for washing at sea between discharge ports.

(d) Associated procedure

- (i) Means for minimizing residues on board
 - Stripping of cargo tanks;
 - Draining and stripping of cargo lines;
 - Final discharge of cargo ashore;
- (ii) Water rinsing of arrival ballast tanks;
- (iii) Filling and ultimate discharge of arrival ballast;
- (iv) Discharge of departure ballast;
- (v) Build-up and decanting of slop tank;
- (vi) Requirements of Regulation 9 of Annex I of the MARPOL Protocol;

(vii) Avoidance of venting in port during ballasting operations.

(e) Safety

- (i) Inert gas procedure;
- (ii) Maintenance and monitoring of inert gas quality and pressure;
- (iii) Stopping of washing/discharge under abnormal inert gas conditions;
- (iv) Electrostatic generation and the precautions required to avoid it;
- (v) Pipework integrity;
- (vi) Avoidance of surge pressures;
- (vii) Spillage.

(f) Check lists

- (i) Before entering port;
- (ii) Before commencing crude oil washing;
- (iii) After crude oil washing;
- (iv) After sailing.

(g) Regulatory enforcement procedures

- (i) Operations and Equipment Manual;
- (ii) Oil Record Book;
- (iii) Sounding of tanks;
- (iv) Measurement of oil on top of departure ballast.

(h) Maintenance of plant and equipment

- (i) Maintenance of equipment in accordance with manufacturers' instructions;
- (ii) Additional maintenance items.

Administrations shall ensure that the training facility issues an appropriate document to those qualified in accordance with this Appendix to serve as officers primarily responsible for crude oil washing.

RESOLUTION 16
EXISTING TANKERS ENGAGED IN SPECIFIC TRADES

The Conference,

Noting that Regulation 13C of Annex I of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973, (MARPOL Protocol) adopted by this Conference, contains provisions for existing tankers engaged in specific trades within specified areas,

Noting further that that Regulation also provides that such areas may be extended to other limits to be designated by the Inter-Governmental Maritime Consultative Organization,

Bearing in mind that such an extension cannot be appropriately considered without a prior assessment of all aspects and consequences thereof,

Resolves that the Organization should expeditiously promote studies of the concept of specific trades which should address at least the following topics:

- (a) Possible extension of specific trades within other limits as provided for in Regulation 13C(I)(b)(ii) of Annex I of the MARPOL Protocol;
- (b) The environmental implications of such an extension;
- (c) Any additional controls which may be necessary to apply such an extension; and
- (d) Any method (such as the method for acceptance of traffic separation schemes) which may be necessary or advisable to enable the Organization to extend specific trades as provided for in Regulation 13C(I)(b)(ii) of Annex I of the MARPOL Protocol.

RESOLUTION 17

PROTECTIVE LOCATION OF BALLAST TANKS IN SEGREGATED BALLAST TANKERS

The Conference,

Noting that Regulation 13E of Annex I of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973, adopted by the Conference contains empirical criteria for the protective location of segregated ballast tanks which are framed to minimize consequences of grounding and collision accidents to the ship, its cargo and the marine environment from inter alia oil outflow, fire, explosion, loss of life and salvage operations,

Noting however that at present the state of knowledge of accident data has not advanced sufficiently to enable the Conference to formulate a possibly more rational probabilistic approach,

Recommends that the Inter-Governmental Maritime Consultative Organization should undertake as soon as possible to study and develop more rational probabilistic formulae or criteria for the protective disposition of segregated ballast tanks, including the feasibility of relating the protective area concept of segregated ballast tanks to the inter-relationship of hypothetical and allowable oil outflow.

RESOLUTION 18
POSSIBLE REPLACEMENT OF "DEADWEIGHT" BY ANOTHER PARAMETER IN THE
PROTOCOL OF 1978 RELATING TO THE INTERNATIONAL CONVENTION FOR THE
PREVENTION OF POLLUTION FROM SHIPS, 1973, AND THE INTERNATIONAL CONVENTION
FOR THE SAFETY OF LIFE AT SEA, 1974, AND ITS PROTOCOL

The Conference,

Noting that the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973, and the International Convention for the Safety of Life at Sea, 1974, and its Protocol contain provisions which use "deadweight" as a parameter to determine the application of various requirements for oil tankers,

Recognizing that "deadweight" might not be the most suitable parameter for the above-mentioned purposes,

Requests the Inter-Governmental Maritime Consultative Organization to study whether "deadweight" in these instruments should be replaced by another parameter which will ensure uniformity in the application of the requirements in these instruments.

INTERNATIONAL CONVENTION FOR THE PREVENTION OF
POLLUTION FROM SHIPS, 1973

The Parties to the Convention,

Being conscious of the need to preserve the human environment in general and the marine environment in particular,

Recognizing that deliberate, negligent or accidental release of oil and other harmful substances from ships constitutes a serious source of pollution,

Recognizing also the importance of the International Convention for the Prevention of Pollution of the Sea by Oil, 1954,¹⁴ as being the first multilateral instrument to be concluded with the prime objective of protecting the environment, and appreciating the significant contribution which that Convention has made in preserving the seas and coastal environment from pollution,

Desiring to achieve the complete elimination of intentional pollution of the marine environment by oil and other harmful substances and the minimization of accidental discharge of such substances,

Considering that this object may best be achieved by establishing rules not limited to oil pollution having a universal purport,

Have agreed as follows:

ARTICLE 1. GENERAL OBLIGATIONS UNDER THE CONVENTION

- (1) The Parties to the Convention undertake to give effect to the provisions of the present Convention and those Annexes thereto by which they are bound, in order to prevent the pollution of the marine environment by the discharge of harmful substances or effluents containing such substances in contravention of the Convention.

¹⁴ United Nations, Treaty Series, vol. 327, p. 3.

- (2) Unless expressly provided otherwise, a reference to the present Convention constitutes at the same time a reference to its Protocols and to the Annexes.

ARTICLE 2. DEFINITIONS

For the purposes of the present Convention, unless expressly provided otherwise:

- (1) "Regulations" means the Regulations contained in the Annexes to the present Convention.
- (2) "Harmful substance" means any substance which, if introduced into the sea, is liable to create hazards to human health, to harm living resources and marine life, to damage amenities or to interfere with other legitimate uses of the sea, and includes any substance subject to control by the present Convention.
- (3) (a) "Discharge", in relation to harmful substances or effluents containing such substances, means any release howsoever caused from a ship and includes any escape, disposal, spilling, leaking, pumping, emitting or emptying;
- (b) "Discharge" does not include:
- (i) Dumping within the meaning of the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, done at London on 13 November 1972;¹⁵ or
- (ii) Release of harmful substances directly arising from the exploration, exploitation and associated off-shore processing of sea-bed mineral resources; or
- (iii) Release of harmful substances for purposes of legitimate scientific research into pollution abatement or control.
- (4) "Ship" means a vessel of any type whatsoever operating in the marine environment and includes hydrofoil boats, air-cushion vehicles, submersibles, floating craft and fixed or floating platforms.
- (5) "Administration" means the Government of the State under whose authority the ship is operating. With respect to a ship entitled to fly a flag of any State, the Administration is the Government of that State. With respect to fixed or floating platforms engaged in exploration and exploitation of the sea-bed and subsoil thereof adjacent to the coast over which the coastal State exercises sovereign rights for the purposes of exploration and exploitation of their natural resources, the Administration is the Government of the coastal State concerned.
- (6) "Incident" means an event involving the actual or probable discharge into the sea of a harmful substance, or effluents containing such a substance.
- (7) "Organization" means the Inter-Governmental Maritime Consultative Organization.

ARTICLE 3. APPLICATION

- (1) The present Convention shall apply to:
- (a) Ships entitled to fly the flag of a Party to the Convention; and

¹⁵ Should read 29 December 1972. For the text of the Convention, see United Nations, Treaty Series, vol. 1046, p. 120.

- (b) Ships not entitled to fly the flag of a Party but which operate under the authority of a Party.
- (2) Nothing in the present Article shall be construed as derogating from or extending the sovereign rights of the Parties under international law over the sea bed and subsoil thereof adjacent to their coasts for the purposes of exploration and exploitation of their natural resources.
- (3) The present Convention shall not apply to any warship, naval auxiliary or other ship owned or operated by a State and used, for the time being, only on government non-commercial service. However, each Party shall ensure by the adoption of appropriate measures not impairing the operations or operational capabilities of such ships owned or operated by it, that such ships act in a manner consistent, so far as is reasonable and practicable, with the present Convention.

ARTICLE 4. VIOLATION

- (1) Any violation of the requirements of the present Convention shall be prohibited and sanctions shall be established therefor under the law of the Administration of the ship concerned wherever the violation occurs. If the Administration is informed of such a violation and is satisfied that sufficient evidence is available to enable proceedings to be brought in respect of the alleged violation, it shall cause such proceedings to be taken as soon as possible, in accordance with its law.
- (2) Any violation of the requirements of the present Convention within the jurisdiction of any Party to the Convention shall be prohibited and sanctions shall be established therefor under the law of that Party. Whenever such a violation occurs, that Party shall either:
 - (a) Cause proceedings to be taken in accordance with its law; or
 - (b) Furnish to the Administration of the ship such information and evidence as may be in its possession that a violation has occurred.
- (3) Where information or evidence with respect to any violation of the present Convention by a ship is furnished to the Administration of that ship, the Administration shall promptly inform the Party which has furnished the information or evidence, and the Organization, of the action taken.
- (4) The penalties specified under the law of a Party pursuant to the present Article shall be adequate in severity to discourage violations of the present Convention and shall be equally severe irrespective of where the violations occur.

ARTICLE 5. CERTIFICATES AND SPECIAL RULES ON INSPECTION OF SHIPS

- (1) Subject to the provisions of paragraph (2) of the present Article a certificate issued under the authority of a Party to the Convention in accordance with the provisions of the Regulations shall be accepted by the other Parties and regarded for all purposes covered by the present Convention as having the same validity as a certificate issued by them.
- (2) A ship required to hold a certificate in accordance with the provisions of the Regulations is subject, while in the ports or off-shore terminals under the jurisdiction of a Party, to inspection by officers duly authorized by that Party. Any such inspection shall be limited to verifying that there is on board a valid certificate, unless there are clear grounds for believing that the condition of the ship or its equipment does not correspond substantially with the particulars of that certificate. In that case, or if the ship does not carry a valid certificate, the Party carrying out the inspection shall take such steps as will ensure that the ship shall not sail until it can proceed to sea without presenting an unreasonable threat of harm to the marine environment.

That Party may, however, grant such a ship permission to leave the port or off-shore terminal for the purpose of proceeding to the nearest appropriate repair yard available.

- (3) If a Party denies a foreign ship entry to the ports or off-shore terminals under its jurisdiction or takes any action against such a ship for the reason that the ship does not comply with the provisions of the present Convention, the Party shall immediately inform the consul or diplomatic representative of the Party whose flag the ship is entitled to fly, or if this is not possible, the Administration of the ship concerned. Before denying entry or taking such action the Party may request consultation with the Administration of the ship concerned. Information shall also be given to the Administration when a ship does not carry a valid certificate in accordance with the provisions of the Regulations.
- (4) With respect to the ships of non-Parties to the Convention, Parties shall apply the requirements of the present Convention as may be necessary to ensure that no more favourable treatment is given to such ships.

ARTICLE 6. DETECTION OF VIOLATIONS AND ENFORCEMENT OF THE CONVENTION

- (1) Parties to the Convention shall co-operate in the detection of violations and the enforcement of the provisions of the present Convention, using all appropriate and practicable measures of detection and environmental monitoring, adequate procedures for reporting and accumulation of evidence.
- (2) A ship to which the present Convention applies may, in any port or off-shore terminal of a Party, be subject to inspection by officers appointed or authorized by that Party for the purpose of verifying whether the ship has discharged any harmful substances in violation of the provisions of the Regulations. If an inspection indicates a violation of the Convention, a report shall be forwarded to the Administration for any appropriate action.
- (3) Any Party shall furnish to the Administration evidence, if any, that the ship has discharged harmful substances or effluents containing such substances in violation of the provisions of the Regulations. If it is practicable to do so, the competent authority of the former Party shall notify the Master of the ship of the alleged violation.
- (4) Upon receiving such evidence, the Administration so informed shall investigate the matter, and may request the other Party to furnish further or better evidence of the alleged contravention. If the Administration is satisfied that sufficient evidence is available to enable proceedings to be brought in respect of the alleged violation, it shall cause such proceedings to be taken in accordance with its law as soon as possible. The Administration shall promptly inform the Party which has reported the alleged violation, as well as the Organization, of the action taken.
- (5) A Party may also inspect a ship to which the present Convention applies when it enters the ports or off-shore terminals under its jurisdiction, if a request for an investigation is received from any Party together with sufficient evidence that the ship has discharged harmful substances or effluents containing such substances in any place. The report of such investigation shall be sent to the Party requesting it and to the Administration so that the appropriate action may be taken under the present Convention.

ARTICLE 7. UNDUE DELAY TO SHIPS

- (1) All possible efforts shall be made to avoid a ship being unduly detained or delayed under Article 4, 5 or 6 of the present Convention.
- (2) When a ship is unduly detained or delayed under Article 4, 5 or 6 of the present Convention, it shall be entitled to compensation for any loss or damage suffered.

ARTICLE 8. REPORTS ON INCIDENTS INVOLVING HARMFUL SUBSTANCES

- (1) A report of an incident shall be made without delay to the fullest extent possible in accordance with the provisions of Protocol I to the present Convention.
- (2) Each Party to the Convention shall:
 - (a) Make all arrangements necessary for an appropriate officer or agency to receive and process all reports on incidents; and
 - (b) Notify the Organization with complete details of such arrangements for circulation to other Parties and Member States of the Organization.
- (3) Whenever a Party receives a report under the provisions of the present Article, that Party shall relay the report without delay to:
 - (a) The Administration of the ship involved; and
 - (b) Any other State which may be affected.
- (4) Each Party to the Convention undertakes to issue instructions to its maritime inspection vessels and aircraft and to other appropriate services, to report to its authorities any incident referred to in Protocol I to the present Convention. That Party shall, if it considers it appropriate, report accordingly to the Organization and to any other party concerned.

ARTICLE 9. OTHER TREATIES AND INTERPRETATION

- (1) Upon its entry into force, the present Convention supersedes the International Convention for the Prevention of Pollution of the Sea by Oil, 1954, as amended, as between Parties to that Convention.
- (2) Nothing in the present Convention shall prejudice the codification and development of the law of the sea by the United Nations Conference on the Law of the Sea convened pursuant to Resolution 2750 C(XXV) of the General Assembly of the United Nations¹⁶ nor the present or future claims and legal views of any State concerning the law of the sea and the nature and extent of coastal and flag State jurisdiction.
- (3) The term "jurisdiction" in the present Convention shall be construed in the light of international law in force at the time of application or interpretation of the present Convention.

¹⁶ United Nations, Official Records of the General Assembly, Twenty-fifth Session, Supplement No. 28 (A/8028), p. 26.

ARTICLE 10. SETTLEMENT OF DISPUTES

Any dispute between two or more Parties to the Convention concerning the interpretation or application of the present Convention shall, if settlement by negotiation between the Parties involved has not been possible, and if these Parties do not otherwise agree, be submitted upon request of any of them to arbitration as set out in Protocol II to the present Convention.

ARTICLE 11. COMMUNICATION OF INFORMATION

- (1) The Parties to the Convention undertake to communicate to the Organization:
 - (a) The text of laws, orders, decrees and regulations and other instruments which have been promulgated on the various matters within the scope of the present Convention;
 - (b) A list of non-governmental agencies which are authorized to act on their behalf in matters relating to the design, construction and equipment of ships carrying harmful substances in accordance with the provisions of the Regulations;
 - (c) A sufficient number of specimens of their certificates issued under the provisions of the Regulations;
 - (d) A list of reception facilities including their location, capacity and available facilities and other characteristics;
 - (e) Official reports or summaries of official reports in so far as they show the results of the application of the present Convention; and
 - (f) An annual statistical report, in a form standardized by the Organization, of penalties actually imposed for infringement of the present Convention.
- (2) The Organization shall notify Parties of the receipt of any communications under the present Article and circulate to all Parties any information communicated to it under sub-paragraphs (l)(b) to (f) of the present Article.

ARTICLE 12. CASUALTIES TO SHIPS

- (1) Each Administration undertakes to conduct an investigation of any casualty occurring to any of its ships subject to the provisions of the Regulations if such casualty has produced a major deleterious effect upon the marine environment.
- (2) Each Party to the Convention undertakes to supply the Organization with information concerning the findings of such investigation, when it judges that such information may assist in determining what changes in the present Convention might be desirable.

ARTICLE 13. SIGNATURE, RATIFICATION, ACCEPTANCE, APPROVAL AND ACCESSION

- (1) The present Convention shall remain open for signature at the Headquarters of the Organization from 15 January 1974 until 31 December 1974 and shall thereafter remain open for accession. States may become Parties to the present Convention by:
 - (a) Signature without reservation as to ratification, acceptance or approval; or
 - (b) Signature subject to ratification, acceptance or approval, followed by ratification, acceptance or approval; or

(c) Accession.

- (2) Ratification, acceptance, approval or accession shall be effected by the deposit of an instrument to that effect with the Secretary-General of the Organization.
- (3) The Secretary-General of the Organization shall inform all States which have signed the present Convention or acceded to it of any signature or of the deposit of any new instrument of ratification, acceptance, approval or accession and the date of its deposit.

ARTICLE 14. OPTIONAL ANNEXES

- (1) A State may at the time of signing, ratifying, accepting, approving or acceding to the present Convention declare that it does not accept any one or all of Annexes III, IV and V (hereinafter referred to as "Optional Annexes") of the present Convention. Subject to the above, Parties to the Convention shall be bound by any Annex in its entirety.
- (2) A State which has declared that it is not bound by an Optional Annex may at any time accept such Annex by depositing with the Organization an instrument of the kind referred to in Article 13(2).
- (3) A State which makes a declaration under paragraph (1) of the present Article in respect of an Optional Annex and which has not subsequently accepted that Annex in accordance with paragraph (2) of the present Article shall not be under any obligation nor entitled to claim any privileges under the present Convention in respect of matters related to such Annex and all references to Parties in the present Convention shall not include that State in so far as matters related to such Annex are concerned.
- (4) The Organization shall inform the States which have signed or acceded to the present Convention of any declaration under the present Article as well as the receipt of any instrument deposited in accordance with the provisions of paragraph (2) of the present Article.

ARTICLE 15. ENTRY INTO FORCE¹⁷

- (1) The present Convention shall enter into force twelve months after the date on which not less than 15 States, the combined merchant fleets of which constitute not less than fifty per cent of the gross tonnage of the world's merchant shipping, have become parties to it in accordance with Article 13.
- (2) An Optional Annex shall enter into force twelve months after the date on which the conditions stipulated in paragraph (1) of the present Article have been satisfied in relation to that Annex.
- (3) The Organization shall inform the States which have signed the present Convention or acceded to it of the date on which it enters into force and of the date on which an Optional Annex enters into force in accordance with paragraph (2) of the present Article.

¹⁷ The International Conference on Tanker Safety and Pollution Prevention, 1978, which adopted the Protocol, envisaged that the International Convention for the Prevention of Pollution from Ships, 1973, should not be subject to independent application, in view of the modifications and additions set out in the 1978 Protocol. It is, therefore, the expectation of the Governments which adopted this policy, and of the depositary, that the 1973 Convention will be applied solely as it is incorporated in the 1978 Protocol, and subject to the aforementioned modifications and additions, but will never enter into force on its own. (Information provided by the International Maritime Organization.)

- (4) For States which have deposited an instrument of ratification, acceptance, approval or accession in respect of the present Convention or any Optional Annex after the requirements for entry into force thereof have been met but prior to the date of entry into force, the ratification, acceptance, approval or accession shall take effect on the date of entry into force of the Convention or such Annex or three months after the date of deposit of the instrument whichever is the later date.
- (5) For States which have deposited an instrument of ratification, acceptance, approval or accession after the date on which the Convention or an Optional Annex entered into force, the Convention or the Optional Annex shall become effective three months after the date of deposit of the instrument.
- (6) After the date on which all the conditions required under Article 16 to bring an amendment to the present Convention or an Optional Annex into force have been fulfilled, any instrument of ratification, acceptance, approval or accession deposited shall apply to the Convention or Annex as amended.

ARTICLE 16. AMENDMENTS

- (1) The present Convention may be amended by any of the procedures specified in the following paragraphs.
- (2) Amendments after consideration by the Organization:
 - (a) Any amendment proposed by a Party to the Convention shall be submitted to the Organization and circulated by its Secretary-General to all Members of the Organization and all Parties at least six months prior to its consideration;
 - (b) Any amendment proposed and circulated as above shall be submitted to an appropriate body by the Organization for consideration;
 - (c) Parties to the Convention, whether or not Members of the Organization, shall be entitled to participate in the proceedings of the appropriate body;
 - (d) Amendments shall be adopted by a two-thirds majority of only the Parties to the Convention present and voting;
 - (e) If adopted in accordance with sub-paragraph (d) above, amendments shall be communicated by the Secretary-General of the Organization to all the Parties to the Convention for acceptance;
 - (f) An amendment shall be deemed to have been accepted in the following circumstances:
 - (i) An amendment to an Article of the Convention shall be deemed to have been accepted on the date on which it is accepted by two-thirds of the Parties, the combined merchant fleets of which constitute not less than fifty per cent of the gross tonnage of the world's merchant fleet;
 - (iii) An amendment to an Annex to the Convention shall be deemed to have been accepted in accordance with the procedure specified in sub-paragraph (f)(iii) unless the appropriate body, at the time of its adoption, determines that the amendment shall be deemed to have been accepted on the date on which it is accepted by two-thirds of the Parties, the combined merchant fleets of which constitute not less than fifty per cent of the gross tonnage of the world's merchant fleet. Nevertheless, at any time before the

entry into force of an amendment to an Annex to the Convention, a Party may notify the Secretary-General of the Organization that its express approval will be necessary before the amendment enters into force for it. The latter shall bring such notification and the date of its receipt to the notice of Parties;

- (iv) An amendment to an Appendix to an Annex to the Convention shall be deemed to have been accepted at the end of a period to be determined by the appropriate body at the time of its adoption, which period shall be not less than ten months, unless within that period an objection is communicated to the Organization by not less than one-third of the Parties or by the Parties the combined merchant fleets of which constitute not less than fifty per cent of the gross tonnage of the world's merchant fleet whichever condition is fulfilled;
- (v) An amendment to Protocol I to the Convention shall be subject to the same procedures as for the amendments to the Annexes to the Convention, as provided for in subparagraphs (f)(ii) or (f)(iii) above;
- (vi) An amendment to Protocol II to the Convention shall be subject to the same procedures as for the amendments to an Article of the Convention, as provided for in subparagraph (f)(i) above;
- (g) The amendment shall enter into force under the following conditions:
 - (i) In the case of an amendment to an Article of the Convention, to Protocol II, or to Protocol I or to an Annex to the Convention not under the procedure specified in subparagraph (f)(iii), the amendment accepted in conformity with the foregoing provisions shall enter into force six months after the date of its acceptance with respect to the Parties which have declared that they have accepted it;
 - (ii) In the case of an amendment to Protocol I, to an Appendix to an Annex or to an Annex to the Convention under the procedure specified in subparagraph (f)(iii), the amendment deemed to have been accepted in accordance with the foregoing conditions shall enter into force six months after its acceptance for all the Parties with the exception of those which, before that date, have made a declaration that they do not accept it or a declaration under subparagraph (f)(ii), that their express approval is necessary.

(3) Amendment by a Conference:

- (a) Upon the request of a Party, concurred in by at least one-third of the Parties, the Organization shall convene a Conference of Parties to the Convention to consider amendments to the present Convention.
- (b) Every amendment adopted by such a Conference by a two-thirds majority of those present and voting of the Parties shall be communicated by the Secretary-General of the Organization to all Contracting Parties for their acceptance.
- (c) Unless the Conference decides otherwise, the amendment shall be deemed to have been accepted and to have entered into force in accordance with the procedures specified for that purpose in paragraph (2)(f) and (g) above.

- (4) (a) In the case of an amendment to an Optional Annex, a reference in the present Article to a "Party to the Convention" shall be deemed to mean a reference to a Party bound by that Annex.

(b) Any Party which has declined to accept an amendment to an Annex shall be treated as a non-Party only for the purpose of application of that Amendment.
- (5) The adoption and entry into force of a new Annex shall be subject to the same procedures as for the adoption and entry into force of an amendment to an Article of the Convention.
- (6) Unless expressly provided otherwise, any amendment to the present Convention made under this Article, which relates to the structure of a ship, shall apply only to ships for which the building contract is placed, or in the absence of a building contract, the keel of which is laid, on or after the date on which the amendment comes into force.
- (7) Any amendment to a Protocol or to an Annex shall relate to the substance of that Protocol or Annex and shall be consistent with the Articles of the present Convention.
- (8) The Secretary-General of the Organization shall inform all Parties of any amendments which enter into force under the present Article, together with the date on which each such amendment enters into force.
- (9) Any declaration of acceptance or of objection to an amendment under the present Article shall be notified in writing to the Secretary-General of the Organization. The latter shall bring such notification and the date of its receipt to the notice of the Parties to the Convention.

ARTICLE 17. PROMOTION OF TECHNICAL CO-OPERATION

The Parties to the Convention shall promote, in consultation with the Organization and other international bodies, with assistance and co-ordination by the Executive Director of the United Nations Environment Programme, support for those Parties which request technical assistance for:

- (a) The training of scientific and technical personnel;
- (b) The supply of necessary equipment and facilities for reception and monitoring;
- (c) The facilitation of other measures and arrangements to prevent or mitigate pollution of the marine environment by ships; and
- (d) The encouragement of research;

preferably within the countries concerned, so furthering the aims and purposes of the present Convention.

ARTICLE 18. DENUNCIATION

- (1) The present Convention or any Optional Annex may be denounced by any Parties to the Convention at any time after the expiry of five years from the date on which the Convention or such Annex enters into force for that Party.
- (2) Denunciation shall be effected by notification in writing to the Secretary-General of the Organization who shall inform all the other Parties of any such notification received and of the date of its receipt as well as the date on which such denunciation takes effect.

- (3) A denunciation shall take effect twelve months after receipt of the notification of denunciation by the Secretary-General of the Organization or after the expiry of any other longer period which may be indicated in the notification.

ARTICLE 19. DEPOSIT AND REGISTRATION

- (1) The present Convention shall be deposited with the Secretary-General of the Organization who shall transmit certified true copies thereof to all States which have signed the present Convention or acceded to it.
- (2) As soon as the present Convention enters into force, the text shall be transmitted by the Secretary-General of the Organization to the Secretary-General of the United Nations for registration and publication, in accordance with Article 102 of the Charter of the United Nations.

ARTICLE 20. LANGUAGES

The present Convention is established in a single copy in the English, French, Russian and Spanish languages, each text being equally authentic. Official translations in the Arabic, German, Italian and Japanese languages shall be prepared and deposited with the signed original.

IN WITNESS WHEREOF the undersigned being duly authorized by their respective Governments for that purpose have signed the present Convention.

DONE at London this second day of November, one thousand nine hundred and seventy-three.

PROTOCOL I PROVISIONS CONCERNING REPORTS ON INCIDENTS INVOLVING HARMFUL SUBSTANCES

(in accordance with Article 8 of the Convention)

ARTICLE I. DUTY TO REPORT

- (1) The Master of a ship involved in an incident referred to in Article III of this Protocol, or other person having charge of the ship, shall report the particulars of such incident without delay and to the fullest extent possible in accordance with the provisions of this Protocol.
- (2) In the event of the ship referred to in paragraph (1) of the present Article being abandoned, or in the event of a report from such ship being incomplete or unobtainable, the owner, charterer, manager or operator of the ship, or their agents shall, to the fullest extent possible assume the obligations placed upon the Master under the provisions of this Protocol.

ARTICLE II. METHODS OF REPORTING

- (1) Each report shall be made by radio whenever possible, but in any case by the fastest channels available at the time the report is made. Reports made by radio shall be given the highest possible priority.
- (2) Reports shall be directed to the appropriate officer or agency specified in paragraph (2)(a) of Article 8 of the Convention.

ARTICLE III. WHEN TO MAKE REPORTS

The report shall be made whenever an incident involves:

- (a) A discharge other than as permitted under the present Convention; or
- (b) A discharge permitted under the present Convention by virtue of the fact that:
 - (i) It is for the purpose of securing the safety of a ship or saving life at sea;
 - (ii) It results from damage to the ship or its equipment; or
- (c) A discharge of a harmful substance for the purpose of combating a specific pollution incident or for purposes of legitimate scientific research into pollution abatement or control; or
- (d) The probability of a discharge referred to in sub-paragraphs (a), (b) or (c) of this Article.

ARTICLE IV. CONTENTS OF REPORT

- (1) Each report shall contain in general:
 - (a) The identity of the ship;
 - (b) The time and date of the occurrence of the incident;
 - (c) The geographic position of the ship when the incident occurred;
 - (d) The wind and sea conditions prevailing at the time of the incident; and
 - (e) Relevant details respecting the condition of the ship.
- (2) Each report shall contain, in particular:
 - (a) A clear indication or description of the harmful substances involved, including, if possible, the correct technical names of such substances (trade names should not be used in place of the correct technical names);
 - (b) A statement or estimate of the quantities, concentrations and likely conditions of harmful substances discharged or likely to be discharged into the sea;
 - (c) Where relevant, a description of the packaging and identifying marks; and
 - (d) If possible the name of the consignor, consignee or manufacturer.
- (3) Each report shall clearly indicate whether the harmful substance discharged, or likely to be discharged is oil, a noxious liquid substance, a noxious solid substance or a noxious gaseous substance and whether such substance was or is carried in bulk or contained in packaged form, freight containers, portable tanks, or road and rail tank wagons.
- (4) Each report shall be supplemented as necessary by any other relevant information requested by a recipient of the report or which the person sending the report deems appropriate.

ARTICLE V. SUPPLEMENTARY REPORT

Any person who is obliged under the provisions of this Protocol to send a report shall, when possible:

- (a) Supplement the initial report, as necessary, with information concerning further developments; and
- (b) Comply as fully as possible with requests from affected States for additional information concerning the incident.

PROTOCOL II ARBITRATION

(in accordance with Article 10 of the Convention)

ARTICLE I.

Arbitration procedure, unless the Parties to the dispute decide otherwise, shall be in accordance with the rules set out in this Protocol.

ARTICLE II.

- (1) An Arbitration Tribunal shall be established upon the request of one Party to the Convention addressed to another in application of Article 10 of the present Convention. The request for arbitration shall consist of a statement of the case together with any supporting documents.
- (2) The requesting Party shall inform the Secretary-General of the Organization of the fact that it has applied for the establishment of a Tribunal, of the names of the Parties to the dispute, and of the Articles of the Convention or Regulations over which there is in its opinion disagreement concerning their interpretation or application. The Secretary-General shall transmit this information to all Parties.

ARTICLE III.

The Tribunal shall consist of three members: one Arbitrator nominated by each Party to the dispute and a third Arbitrator who shall be nominated by agreement between the two first named, and shall act as its Chairman.

ARTICLE IV.

- (1) If, at the end of a period of sixty days from the nomination of the second Arbitrator, the Chairman of the Tribunal shall not have been nominated, the Secretary-General of the Organization upon request of either Party shall within a further period of sixty days proceed to such nomination, selecting him from a list of qualified persons previously drawn up by the Council of the Organization.
- (2) If, within a period of sixty days from the date of the receipt of the request, one of the Parties shall not have nominated the member of the Tribunal for whose designation it is responsible, the other Party may directly inform the Secretary-General of the Organization who shall nominate the Chairman of the Tribunal within a period of sixty days, selecting him from the list prescribed in paragraph (1) of the present Article.

- (3) The Chairman of the Tribunal shall, upon nomination, request the Party which has not provided an Arbitrator, to do so in the same manner and under the same conditions. If the Party does not make the required nomination, the Chairman of the Tribunal shall request the Secretary-General of the Organization to make the nomination in the form and conditions prescribed in the preceding paragraph.
- (4) The Chairman of the Tribunal, if nominated under the provisions of the present Article, shall not be or have been a national of one of the Parties concerned, except with the consent of the other Party.
- (5) In the case of the decease or default of an Arbitrator for whose nomination one of the Parties is responsible, the said Party shall nominate a replacement within a period of sixty days from the date of decease or default. Should the said Party not make the nomination, the arbitration shall proceed under the remaining Arbitrators. In case of the decease or default of the Chairman of the Tribunal, a replacement shall be nominated in accordance with the provisions of Article III above, or in the absence of agreement between the members of the Tribunal within a period of sixty days of the decease or default, according to the provisions of the present Article.

ARTICLE V.

The Tribunal may hear and determine counter-claims arising directly out of the subject matter of the dispute.

ARTICLE VI.

Each Party shall be responsible for the remuneration of its Arbitrator and connected costs and for the costs entailed by the preparation of its own case. The remuneration of the Chairman of the Tribunal and of all general expenses incurred by the Arbitration shall be borne equally by the Parties. The Tribunal shall keep a record of all its expenses and shall furnish a final statement thereof.

ARTICLE VII.

Any Party to the Convention which has an interest of a legal nature and which may be affected by the decision in the case may, after giving written notice to the Parties which have originally initiated the procedure, join in the arbitration procedure with the consent of the Tribunal.

ARTICLE VIII.

Any Arbitration Tribunal established under the provisions of the present Protocol shall decide its own rules of procedure.

ARTICLE IX.

- (1) Decisions of the Tribunal both as to its procedure and its place of meeting and as to any question laid before it, shall be taken by majority votes of its members; the absence or abstention of one of the members of the Tribunal for whose nomination the Parties were responsible, shall not constitute an impediment to the Tribunal reaching a decision. In cases of equal voting, the vote of the Chairman shall be decisive.
- (2) The Parties shall facilitate the work of the Tribunal and in particular, in accordance with their legislation, and using all means at their disposal:
 - (a) Provide the Tribunal with the necessary documents and information;

(b) Enable the Tribunal to enter their territory, to hear witnesses or experts, and to visit the scene.

(3) Absence or default of one Party shall not constitute an impediment to the procedure.

ARTICLE X.

(1) The Tribunal shall render its award within a period of five months from the time it is established unless it decides, in the case of necessity, to extend the time limit for a further period not exceeding three months. The award of the Tribunal shall be accompanied by a statement of reasons. It shall be final and without appeal and shall be communicated to the Secretary-General of the Organization. The Parties shall immediately comply with the award.

(2) Any controversy which may arise between the Parties as regards interpretation or execution of the award may be submitted by either Party for judgment to the Tribunal which made the award, or, if it is not available to another Tribunal constituted for this purpose, in the same manner as the original Tribunal.