



UNITED NATIONS ENVIRONMENT PROGRAMME

Intergovernmental Consultation Concerning
a Draft Protocol for the Protection of the
Mediterranean Sea Against Pollution from
Land-Based Sources

Athens, 7-11 February 1977

Distr.
RESTRICTED
UNEP/IG.6/INF.3
15 October 1976

Original: ENGLISH

COMPENDIUM

OF PRINCIPAL INTERNATIONAL INSTRUMENTS
RELEVANT TO THE
DRAFT PROTOCOL FOR THE PROTECTION OF THE MEDITERRANEAN SEA
AGAINST POLLUTION FROM LAND-BASED SOURCES

Prepared in co-operation with the
World Health Organization

Introduction

This background paper contains extracts from multilateral conventions and draft legal instruments which appear of particular relevance to the proposed Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources. It also presents information on the present status of acceptance of these instruments. The paper has been compiled by the World Health Organization (WHO) with the support of the United Nations Environment Programme (UNEP) to facilitate comparison with the Principles suggested for inclusion in the Draft Protocol (document UNEP/IG.6/3) and the Proposed Technical Annexes (document UNEP/IG.6/4).

The present compendium covers only international instruments covering larger geographical areas. For more general surveys of international instruments in the field of marine pollution control reference may be made to the following two documents:

- FAO: Existing and Proposed International Conventions for the Control of Marine Pollution and their Relevance to the Mediterranean. Legal Office Background Paper No. 8, 1975 (revised version of document FID:PPM/74/5).
- ECE: List of Treaties, Conventions and Agreements Concerning Environmental Problems of Large Areas. Document ENV/R.35 of 2 October 1975.

Contents

	<u>Page</u>
A. <u>Barcelona Framework Convention</u>	A1 to A9
CONVENTION FOR THE PROTECTION OF THE MEDITERRANEAN SEA AGAINST POLLUTION opened for signature at Barcelona on 16 February 1976	
B. <u>Barcelona Dumping Protocol</u>	B1 to B5
PROTOCOL FOR THE PREVENTION OF POLLUTION OF THE MEDITERRANEAN SEA BY DUMPING FROM SHIPS AND AIRCRAFT opened for signature at Barcelona on 16 February 1976	
C. <u>Rome Criteria</u>	C1 to C4
CRITERIA AND PRINCIPLES FOR DISCHARGES OF MATTER OR ENERGY INTO COASTAL WATERS presented to the FAO Consultation on the Protection of Living Resources and Fisheries from Pollution in the Mediterranean held in Rome from 19 to 23 February and from 27 to 31 May 1974	
D. <u>Rome Guidelines</u>	D1
GUIDELINES WHICH COULD SERVE AS A BASIS FOR THE DRAFTING OF A FRAMEWORK CONVENTION ON THE PROTECTION OF THE MARINE ENVIRONMENT AGAINST POLLUTION IN THE MEDITERRANEAN adopted by the FAO Consultation in Rome in 1974	
E. <u>Paris Convention</u>	E1 to E9
CONVENTION FOR THE PREVENTION OF MARINE POLLUTION FROM LAND-BASED SOURCES opened for signature at Paris on 4 June 1974	
F. <u>Helsinki Convention</u>	F1 to F8
CONVENTION ON THE PROTECTION OF THE MARINE ENVIRONMENT OF THE BALTIC SEA AREA opened for signature at Helsinki on 22 March 1974	

- G. UN Conference on the Law of the Sea G1 to G9
- REVISED SINGLE NEGOTIATING TEXT: PROTECTION
AND PRESERVATION OF THE MARINE ENVIRONMENT
presented by the Chairman of the Third Committee
on 6 May 1976 at the Third Conference on the Law
of the Sea
- H. Council of Europe Draft H1 to H13
- DRAFT EUROPEAN CONVENTION FOR
THE PROTECTION OF INTERNATIONAL WATERCOURSES
AGAINST POLLUTION
transmitted by the Committee of Ministers to the
Consultative Assembly on 4 April 1974
- I. European Communities I1 to I10
- COUNCIL DIRECTIVE OF 4 MAY 1976 ON POLLUTION
CAUSED BY CERTAIN DANGEROUS SUBSTANCES
DISCHARGED INTO THE AQUATIC ENVIRONMENT OF
THE COMMUNITY
published in Official Journal No. L 129 of
18 May 1976

A. Barcelona Framework ConventionCONVENTION FOR THE PROTECTION OF THE MEDITERRANEAN SEA
AGAINST POLLUTIONopened for signature at Barcelona
on 16 February 1976Article 4General undertakings

2. The Contracting Parties shall co-operate in the formulation and adoption of protocols in addition to the Protocols opened for signature at the same time as this Convention, prescribing agreed measures, procedures and standards for the implementation of this Convention.

Article 7Pollution resulting from exploration and exploitation
of the continental shelf and the seabed and its subsoil

The Contracting Parties shall take all appropriate measures to prevent, abate, and combat pollution of the Mediterranean Sea Area resulting from exploration and exploitation of the continental shelf and the seabed and its subsoil.

Article 8Pollution from land-based sources

The Contracting Parties shall take all appropriate measures to prevent and abate pollution of the Mediterranean Sea Area caused by discharges from rivers, coastal establishments or outfalls, or emanating from any other land-based sources within their territories.

Article 13Institutional arrangements

The Contracting Parties designate the United Nations Environment Programme as responsible for carrying out the following secretariat functions:

- (i) To convene and prepare the meetings of Contracting Parties and conferences provided for in Articles 14, 15 and 16.

- (ii) To transmit to the Contracting Parties notifications, reports and other information received in accordance with Articles 3, 9, and 20;
- (iii) To consider inquiries by, and information from, the Contracting Parties, and to consult with them on questions relating to this Convention and the protocols and annexes thereto;
- (iv) To perform the functions assigned to it by the protocols to this Convention;
- (v) To perform such other functions as may be assigned to it by the Contracting Parties;
- (vi) To ensure the necessary co-ordination with other international bodies which the Contracting Parties consider competent, and in particular to enter into such administrative arrangements as may be required for the effective discharge of the secretariat functions.

Article 14

Meetings of the Contracting Parties

1. The Contracting Parties shall hold ordinary meetings once every two years, and extraordinary meetings at any other time deemed necessary, upon the request of the Organization or at the request of any Contracting Party, provided that such requests are supported by at least two Contracting Parties.
2. It shall be the function of the meetings of the Contracting Parties to keep under review the implementation of this Convention and the protocols and, in particular:
 - (i) To review generally the inventories carried out by Contracting Parties and competent international organizations on the state of marine pollution and its effects in the Mediterranean Sea Area;
 - (ii) To consider reports submitted by the Contracting Parties under Article 20;
 - (iii) To adopt, review and amend as required the annexes to this Convention and to the protocols, in accordance with the procedure established in Article 17;
 - (iv) To make recommendations regarding the adoption of any additional protocols or any amendments to this Convention or the protocols in accordance with the provisions of Articles 15 and 16;
 - (v) To establish working groups as required to consider any matters related to this Convention and the protocols and annexes;

- (vi) To consider and undertake any additional action that may be required for the achievement of the purposes of this Convention and the protocols.

Article 15

Adoption of additional protocols

1. The Contracting Parties, at a diplomatic conference, may adopt additional protocols to this Convention pursuant to paragraph 2 of Article 4.
2. A diplomatic conference for the purpose of adopting additional protocols shall be convened by the Organization at the request of two thirds of the Contracting Parties.
3. Pending the entry into force of this Convention, the Organization may, after consulting with the signatories to this Convention, convene a diplomatic conference for the purpose of adopting additional protocols.

Article 16

Amendment of the Convention or Protocols

1. Any Contracting Party to this Convention may propose amendments to the Convention. Amendments shall be adopted by a diplomatic conference which shall be convened by the Organization at the request of two thirds of the Contracting Parties.
2. Any Contracting Party to this Convention may propose amendments to any protocol. Such amendments shall be adopted by a diplomatic conference which shall be convened by the Organization at the request of two thirds of the Parties to the protocol concerned.
3. Amendments to this Convention shall be adopted by a three-fourths majority vote of the Contracting Parties to the Convention which are represented at the diplomatic conference, and shall be submitted by the Depositary for acceptance by all Contracting Parties to the Convention. Amendments to any protocol shall be adopted by a three-fourths majority vote of the Contracting Parties to such protocol which are represented at the diplomatic conference, and shall be submitted by the Depositary for acceptance by all Contracting Parties to such protocol.

4. Acceptance of amendments shall be notified to the Depositary in writing. Amendments adopted in accordance with paragraph 3 of this article shall enter into force between Contracting Parties having accepted such amendments on the thirtieth day following the receipt by the Depositary of notification of their acceptance by at least three fourths of the Contracting Parties to this Convention or to the protocol concerned, as the case may be.
5. After the entry into force of an amendment to this Convention or to a protocol, any new Contracting Party to this Convention or such protocol shall become a Contracting Party to the instrument as amended.

Article 17

Annexes and amendments to Annexes

1. Annexes to this Convention or to any protocol shall form an integral part of the Convention or such protocol, as the case may be.
2. Except as may be otherwise provided in any protocol, the following procedure shall apply to the adoption and entry into force of any amendments to annexes to this Convention or to any Protocol, with the exception of amendments to the Annex on arbitration:
 - (i) Any Contracting Party may propose amendments to the annexes to this Convention or to protocols at the meetings referred to in article 14;
 - (ii) Such amendments shall be adopted by a three fourths majority vote of the Contracting Parties to the instrument in question;
 - (iii) The Depositary shall without delay communicate the amendments so adopted to all Contracting Parties;
 - (iv) Any Contracting Party that is unable to approve an amendment to the annexes to this Convention or to any protocol shall so notify in writing the Depositary within a period determined by the Contracting Parties concerned when adopting the amendment;
 - (v) The Depositary shall without delay notify all Contracting Parties of any notification received pursuant to the preceding sub-paragraph;
 - (vi) On expiry of the period referred to in sub-paragraph (iv) above, the amendment to the annex shall become effective for all Contracting Parties to this Convention or to the protocol concerned which have not submitted a notification in accordance with the provisions of that sub-paragraph.

3. The adoption and entry into force of a new annex to this Convention or to any protocol shall be subject to the same procedure as for the adoption and entry into force provided that, if any amendment to the Convention or the protocol concerned is involved the new annex shall not enter into force until such time as the amendment to the Convention or the protocol concerned enters into force.
4. Amendments to the annex on arbitration shall be considered to be amendments to this Convention and shall be proposed and adopted in accordance with the procedures set out in article 16 above.

Article 18

Rules of procedure and financial rules

1. The Contracting Parties shall adopt rules of procedure for their meetings and conferences envisaged in articles 14, 15, and 16 above.
2. The Contracting Parties shall adopt financial rules, prepared in consultation with the Organization, to determine, in particular, their financial participation.

Article 19

Special exercise of voting right

Within the areas of their competence, the European Economic Community and any regional economic grouping referred to in article 24 of this Convention shall exercise their right to vote with a number of votes equal to the number of their member States which are Contracting Parties to this Convention and to one or more Protocols; the European Economic Community and any grouping as referred to above shall not exercise their right to vote in cases where the member States concerned exercise theirs, and conversely.

Article 20

Reports

The Contracting Parties shall transmit to the Organization reports on the measures adopted in implementation of this Convention and of Protocols to which they are Parties, in such form and at such intervals as the meetings of Contracting Parties may determine.

Article 21

Compliance control

The Contracting Parties undertake to co-operate in the development of procedures enabling them to control the application of this Convention and the Protocols.

Article 22

Settlement of disputes

1. In case of a dispute between Contracting Parties as to the interpretation or application of this Convention or the Protocols, they shall seek a settlement of the dispute through negotiation or any other peaceful means of their own choice.
2. If the parties concerned cannot settle their dispute through the means mentioned in the preceding paragraph, the dispute shall upon common agreement be submitted to arbitration under the conditions laid down in Annex A to this Convention.
3. Nevertheless, the Contracting Parties may at any time declare that they recognize as compulsory ipso facto and without special agreement, in relation to any other Party accepting the same obligation, the application of the arbitration procedure in conformity with the provisions of Annex A. Such declaration shall be notified in writing to the Depositary, who shall communicate it to the other Parties.

Article 23

Relationship between the Convention and protocols

1. No one may become a Contracting Party to this Convention unless it becomes at the same time a Contracting Party to at least one of the protocols. No one may become a Contracting Party to a protocol unless it is, or becomes at the same time a Contracting Party to this Convention.
2. Any protocol to this Convention shall be binding only on the Contracting Parties to the protocol in question.
3. Decisions concerning any protocol pursuant to articles 14, 16 and 17 of this Convention shall be taken only by the Parties to the protocol concerned.

Article 24

Signature

This Convention, the Protocol for the Prevention of Pollution of the Mediterranean Sea by Dumping from Ships and Aircraft and the Protocol concerning

Co-operation in Combating Pollution of the Mediterranean Sea by Oil and Other Harmful Substances in Cases of Emergency shall be open for signature in Barcelona on 16 February 1976 and in Madrid from 17 February 1976 to 16 February 1977 by any State invited as a participant in the Conference of Plenipotentiaries of the Coastal States of the Mediterranean Region on the Protection of the Mediterranean Sea, held in Barcelona from 2 to 16 February 1976, and by any State entitled to sign any protocol in accordance with the provisions of such Protocol. They shall also be open until the same date for signature by the European Economic Community and by any similar regional economic grouping at least one member of which is a coastal State of the Mediterranean Sea Area and which exercise competences in fields covered by this Convention, as well as by any protocol affecting them.

Article 25

Ratification, acceptance or approval

This Convention and any protocol thereto shall be subject to ratification, acceptance, or approval. Instruments of ratification, acceptance or approval shall be deposited with the Government of Spain, which will assume the functions of Depositary.

Article 26

Accession

1. As from 16 February 1977, the present Convention, the Protocol for the Prevention of Pollution of the Mediterranean Sea by Dumping from Ships and Aircraft, and the Protocol concerning Co-operation in Combating Pollution of the Mediterranean Sea by Oil and other Harmful Substances in Cases of Emergency shall be open for accession by the States, by the European Economic Community and by any grouping as referred to in article 24.
2. After the entry into force of the Convention and of any protocol, any State not referred to in article 24 may accede to this Convention and to any protocol, subject to prior approval by three-fourths of the Contracting Parties to the protocol concerned.
3. Instruments of accession shall be deposited with the Depositary.

Article 27

Entry into force

1. This Convention shall enter into force on the same date as the protocol first entering into force.

2. The Convention shall also enter into force with regard to the States, the European Economic Community and any regional economic grouping referred to in article 24 if they have complied with the formal requirements for becoming Contracting Parties to any other protocol not yet entered into force.
3. Any protocol to this Convention, except as otherwise provided in such protocol, shall enter into force on the thirtieth day following the date of deposit of at least six instruments of ratification, acceptance, or approval of, or accession to such protocol by the Parties referred to in article 24.
4. Thereafter, this Convention and any protocol shall enter into force with respect to any State, the European Economic Community and any regional economic grouping referred to in article 24 on the thirtieth day following the date of deposit of the instruments of ratification, acceptance, approval or accession.

Article 28

Withdrawal

1. At any time after three years from the date of entry into force of this Convention, any Contracting Party may withdraw from this Convention by giving written notification of withdrawal.
2. Except as may be otherwise provided in any protocol to this Convention, any Contracting Party may, at any time after three years from the date of entry into force of such protocol, withdraw from such protocol by giving written notification of withdrawal.
3. Withdrawal shall take effect 90 days after the date on which notification of withdrawal is received by the Depositary.
4. Any Contracting Party which withdraws from this Convention shall be considered as also having withdrawn from any protocol to which it was a Party.
5. Any Contracting Party which, upon its withdrawal from a protocol, is no longer a Party to any protocol to this Convention, shall be considered as also having withdrawn from this Convention.

Article 29

Responsibilities of the Depositary

1. The Depositary shall inform the Contracting Parties, any other Party referred in article 24, and the Organizations:
 - (i) Of the signature of this Convention and of any protocol thereto, and of the deposit of instruments of ratification, acceptance, approval or accession in accordance with articles 24, 25, and 26;

- (ii) Of the date on which the Convention and any protocol will come into force in accordance with the provisions of article 27;
- (iii) Of notifications of withdrawal made in accordance with article 28;
- (iv) Of the amendments adopted with respect to the Convention and to any protocol, their acceptance by the Contracting Parties and the date of entry into force of those amendments in accordance with the provisions of article 16;
- (v) Of the adoption of new annexes and of the amendment of any annex in accordance with article 17;
- (vi) Of declarations recognizing as compulsory the application of the arbitration procedure mentioned in paragraph 3 of article 22.

2. The original of this Convention and of any protocol thereto shall be deposited with the Depository, the Government of Spain, which shall send certified copies thereof to the Contracting Parties, to the Organization, and to the Secretary-General of the United Nations for registration and publication in accordance with Article 102 of the United Nations Charter.

IN WITNESS WHEREOF the undersigned, being duly authorized by their respective Governments, have signed this Convention.

DONE at Barcelona on 16 February 1976 in a single copy in the Arabic, English, French and Spanish languages, the four texts being equally authoritative.

B. Barcelona Dumping Protocol

PROTOCOL FOR THE PREVENTION OF POLLUTION OF THE
MEDITERRANEAN SEA BY DUMPING FROM SHIPS AND AIRCRAFT
opened for signature at Barcelona
on 16 February 1976

Article 4

The dumping into the Mediterranean Sea Area of wastes or other matter listed in Annex I to this Protocol is prohibited.

Article 5

The dumping into the Mediterranean Sea Area of wastes or other matter listed in Annex II to this Protocol requires, in each case, a prior special permit from the competent national authorities.

Article 6

The dumping into the Mediterranean Sea Area of all other wastes or other matter requires a prior general permit from the competent national authorities.

Article 7

The permits referred to in Articles 5 and 6 shall be issued only after careful consideration of all the factors set forth in Annex III to this Protocol. The Organization shall receive records of such permits.

ANNEX I

A. The following substances and materials are listed for the purpose of article 4 of the Protocol.

1. Organohalogen compounds and compounds which may form substances in the marine environment, excluding those which are non-toxic or which are rapidly converted in the sea into substances which are biologically harmless, provided that they do not make edible marine organisms unpalatable.
2. Organosilicon compounds and compounds which may form such substances in the marine environment excluding those which are non-toxic or which are rapidly converted in the sea into substances which are biologically harmless, provided that they do not make edible marine organisms unpalatable.
3. Mercury and mercury compounds.
4. Cadmium and cadmium compounds.
5. Persistent plastic and other persistent synthetic materials which may materially interfere with fishing or navigation, reduce amenities, or interfere with other legitimate uses of the sea.
6. Crude oil and hydrocarbons which may be derived from petroleum, and any mixtures containing any of these, taken on board for the purpose of dumping.
7. High- and medium- and low-level radioactive wastes or other high- and medium- and low-level radioactive matter to be defined by the International Atomic Energy Agency.
8. Acid and alkaline compounds of such composition and in such quantity that they may seriously impair the quality of sea water. The composition and quantity to be taken into consideration shall be determined by the Parties in accordance with the procedure laid down in article 14, paragraph 3, of this Protocol.
9. Materials in whatever form (e.g. solids, liquids, semi-liquids, gases, or in a living state) produced for biological and chemical warfare, other than those rapidly rendered harmless by physical, chemical or biological processes in the sea provided that they do not:
 - (i) Make edible marine organisms unpalatable; or
 - (ii) Endanger human or animal health.

B. This Annex does not apply to wastes or other materials, such as sewage sludge and dredge spoils, containing the substances referred to in paragraphs 1-6 above as trace contaminants. The dumping of such wastes shall be subject to the provisions of Annexes II and III as appropriate.

ANNEX II

The following wastes and other matter the dumping of which requires special care are listed for the purposes of article 5.

1.
 - (i) Arsenic, lead, copper, zinc, beryllium, chromium, nickel, vanadium, selenium, antimony and their compounds;
 - (ii) Cyanides and fluorides;
 - (iii) Pesticides and their by-products not covered in Annex I;
 - (iv) Synthetic organic chemicals, other than those referred to in Annex I, likely to produce harmful effects on marine organisms or to make edible marine organisms unpalatable.
2.
 - (i) Acid and alkaline compounds the composition and quantity of which have not yet been determined in accordance with the procedure referred to in Annex I, paragraph A. 8.
 - (ii) Acid and alkaline compounds not covered by Annex I, excluding compounds to be dumped in quantities below thresholds which shall be determined by the Parties in accordance with the procedure laid down in article 14, paragraph 3 of this Protocol.
3. Containers, scrap metal and other bulky wastes liable to sink to the sea bottom which may present a serious obstacle to fishing or navigation.
4. Substances which, though of a non-toxic nature may become harmful owing to the quantities in which they are dumped, or which are liable to reduce amenities seriously or to endanger human life or marine organisms or to interfere with navigation.
5. Radioactive waste or other radioactive matter which will not be included in Annex I. In the issue of permits for the dumping of this matter, the Parties should take full account of the recommendations of the competent international body in this field, at present the International Atomic Energy Agency.

ANNEX III

The factors to be considered in establishing criteria governing the issue of permits for the dumping of matter at sea taking into account Article 7 include:

A. Characteristics and composition of the matter

1. Total amount and average composition of matter dumped (e.g. per year).
2. Form (e.g. solid, sludge, liquid or gaseous).
3. Properties: physical (e.g. solubility and density), chemical and biochemical (e.g. oxygen demand, nutrients) and biological (e.g. presence of viruses, bacteria, yeasts, parasites).
4. Toxicity.
5. Persistence: physical, chemical and biological.
6. Accumulation and biotransformation in biological materials or sediments.
7. Susceptibility to physical, chemical and biochemical changes and interaction in the aquatic environment with other dissolved organic and inorganic materials.
8. Probability of production of taints or other changes reducing marketability of resources (fish, shellfish, etc.).

B. Characteristics of dumping site and method of deposit

1. Location (e.g. co-ordinates of the dumping area, depth and distance from the coast), location in relation to other areas (e.g. amenity areas, spawning, nursery and fishing areas and exploitable resources).
2. Rate of disposal per specific period (e.g. quantity per day, per week, per month).
3. Methods of packaging and containment, if any.
4. Initial dilution achieved by proposed method of release, particularly the speed of the ship.
5. Dispersal characteristics (e.g. effects of currents, tides and wind on horizontal transport and vertical mixing).

6. Water characteristics (e.g. temperature, pH, salinity, stratification, oxygen indices of pollution - dissolved oxygen (DO), chemical oxygen demand (COD), biochemical oxygen demand (BOD) - nitrogen present in organic and mineral form including ammonia, suspended matter, other nutrients and productivity).
7. Bottom characteristics (e.g. topography, geochemical and geological characteristics and biological productivity).
8. Existence and effects of other dumping which have been made in the dumping area (e.g. heavy metal background reading and organic carbon content).
9. When issuing a permit for dumping, the Contracting Parties shall endeavour to determine whether an adequate scientific basis exists for assessing the consequences of such dumping in the area concerned, in accordance with the foregoing provisions and taking into account seasonal variations.

C. General considerations and conditions

1. Possible effects on amenities (e.g. presence of floating or stranded material, turbidity, objectionable odour, discolouration and foaming).
2. Possible effects on marine life, fish and shellfish culture, fish stocks and fisheries, seaweed harvesting and culture.
3. Possible effects on other uses of the sea (e.g. impairment of water quality for industrial use, underwater corrosion of structures, interference with ship operations from floating materials, interference with fishing or navigation through deposit of waste or solid objects on the sea floor and protection of areas of special importance for scientific or conservation purposes).
4. The practical availability of alternative land-based methods of treatment disposal or elimination, or of treatment to render the matter less harmful for sea dumping.

C. Rome Criteria

CRITERIA AND PRINCIPLES FOR DISCHARGES OF MATTER
OR ENERGY INTO COASTAL WATERS

presented to the
Consultation on the Protection of Living Resources and Fisheries
from Pollution in the Mediterranean
held in Rome from 19 to 23 February and from 27 to 31 May 1974*

INTRODUCTION

Principle 7 of document FID: PPM/73/6 suggests that the proposed Convention

"... should ensure that Contracting Parties take the necessary action to prevent and abate pollution caused by discharges from rivers, coastal establishments or outfalls, or emanating from any other sources within their territories, which endangers or is likely to endanger the marine environment and thus living resources and fisheries in the Convention area. The Convention should also provide for the eventual adoption of agreed quality or discharge standards (as illustrated in document FID: PPM/73/6, Add.2) and other suitable methods of implementation."

It is the objective of this addendum to discuss the possible bases on which such standards and other controls could eventually be formulated under the proposed Convention.

Discharges into coastal waters occur both directly, through pipelines, sewerage systems and coastal dumping operations, and indirectly through discharges into rivers and estuarine areas. In either case the pollution resulting from such discharges is of particular significance for living resources, fisheries and aquaculture, attacking, as it does, the most productive and at the same time the most vulnerable areas of the seas. The effects of coastal discharges in the Mediterranean Sea are magnified by the semi-enclosed nature of that sea.

As already mentioned in document FID: PPM/73/6, no global or regional multilateral agreements have yet sought to impose controls over coastal discharges, although the various initiatives presently under consideration for the North-east Atlantic and the Baltic Sea regions would attempt to do so for these regions. At the global level, several of the proposals put forward by individual governments to the United Nations Committee on the Peaceful Uses of the Sea-Bed and the Ocean Floor Beyond the Limits of National Jurisdiction would also cover coastal discharges.

* FAO document first issued in October 1973 under the symbol FID: PPM/73/6, Add.2 and subsequently reissued under the symbol FID: PPM/74/6, Add.2 in English, French and Spanish.

It is generally recognized that, although in some cases the effects of coastal discharges may be confined within the territorial sea of the discharging State, in many cases these effects will spill over into the territorial waters of neighbouring States or into the marine environment beyond the limits of national jurisdiction. This transfer of effects across national boundaries may occur in any number of ways. It may be caused, for example, by the transport of the pollutants themselves by ocean currents, by the accumulation of pollutants in fish or other marine organisms that themselves cross national frontiers, or by the effect of pollution on the migration habits of fish stocks on which the fishermen of other States may depend for their livelihood. In such cases some harmonization of national controls over coastal discharges and the adoption of common standards would seem to be essential.

The underlying criterion for the eventual formulation of any common discharge quality or receiving water quality standards for coastal discharges under the proposed Convention should therefore be the extent to which the discharges are likely to have adverse effects on the marine environment, and in particular on shared living resources and fisheries beyond the territorial limits of the discharging State. The following are suggested guidelines for the establishment of common standards based upon that criterion.

1 ACCEPTABLE DISCHARGES

Matter or energy which, if discharged in the proposed way, is known to cause negligible direct or indirect harm to living resources of present or potential value for other nations, and not to involve health risks, hindrance to maritime activities or reduction of amenities beyond the limits of national jurisdiction.

2 DISCHARGES SUBJECT TO SPECIFIC REGULATIONS

Matter or energy which:

- (i) in any physical state (particulate, liquid or gaseous) is liable to cross territorial borders in significant quantities or concentrations to impair the quality of extra-national waters or sea-bed with consequent harm to living resources, or
- (ii) on the basis of bioassays and other scientific data, is liable to bioaccumulation or biotransformation, or to have deleterious effects on quality (including health hazard, tainting, objectionable odour or appearance), reproduction, or production of living resources of present or potential value for other nations, or
- (iii) on the basis of bioassays and other scientific data, is liable to alter migratory habits of organisms (avoidance) with adverse effects on their exploitation beyond the limits of national jurisdiction.

Standards should cover, e.g., treatment requirements for effluents, maximum acceptable rates of discharge, maximum acceptable concentrations in effluent-receiving sea water or marine indicator organisms. It should be the task of a technical working group with representation from the Contracting Parties to the Convention, to agree on such standards in accordance with procedures laid down in the Convention.

Major categories of marine pollutants to be covered by such standards would be:

- (i) Domestic Sewage
- (ii) Pesticides
 - Organochlorine compounds Herbicides
 - Organophosphorus compounds Mercurial compounds
 - Carbamate compounds
- (iii) Polychlorinated Biphenyls (PCB)
- (iv) Inorganic Wastes
 - Acids and alkalis Copper
 - Nutrients and Ammonia Zinc
 - Cyanide Cadmium
 - Sulphite Arsenic
 - Mercury Other metal compounds
 - Lead
- (v) Radioactive and Thermal Energy
- (vi) Oil
 - crude lubricating
 - fuel hydraulic
 - heavy diesel others
- (vii) Organic Chemicals
- (viii) Organic Wastes
 - Pulp and paper wastes Other high BOD wastes
- (ix) Detergents

3 DISCHARGES FOR WHICH VERY STRINGENT STANDARDS HAVE TO BE DEVELOPED

It would be necessary to identify waste material for which very stringent standards have to be applied. Among those the following matters should be listed:

Organochlorine compounds

PCBs

Mercury

Lead

Cadmium

All types of oil

Organic chemicals

D. Rome Guidelines

GUIDELINES
WHICH COULD SERVE AS A BASIS FOR THE DRAFTING OF
A FRAMEWORK CONVENTION ON THE PROTECTION OF THE MARINE ENVIRONMENT
AGAINST POLLUTION IN THE MEDITERRANEAN
adopted by the
FAO Consultation on the Protection of Living Resources
and Fisheries from Pollution in the Mediterranean
held in Rome from 19 to 23 February and 27 to 31 May 1974*

Pollution from land-based sourcesGuideline 7

The framework convention and/or the protocols should provide that the Contracting Parties should take the necessary measures to prevent and abate marine pollution caused by discharges from rivers, coastal establishments or outfalls, or emanating from any other sources within their territories

The framework convention and/or the protocols should also provide for the eventual adoption of agreed environmental quality standards, established in light of local conditions, uses of the marine environment and the type of pollution, and/or other suitable methods of implementation, such as, in particular, programmes to prevent or abate pollution by specified substances.

*Annex I to the Report of the Consultation published in June 1974 in the
FAO Fisheries Reports, N.148 (FID/R148) in English, French and Spanish.

E. Paris Convention

CONVENTION
FOR THE PREVENTION OF MARINE POLLUTION
FROM LAND-BASED SOURCES
opened for signature at Paris on 4 June 1974*

Article 1

1. The Contracting Parties pledge themselves to take all possible steps to prevent pollution of the sea, by which is meant the introduction by man, directly or indirectly, of substances or energy into the marine environment (including estuaries) resulting in such deleterious effects as hazards to human health, harm to living resources and to marine eco-systems, damage to amenities or interference with other legitimate uses of the sea.
2. The Contracting Parties shall adopt individually and jointly measures to combat marine pollution from land-based sources in accordance with the provisions of the present convention and shall harmonize their policies in this regard.

Article 2

The present Convention shall apply to the maritime area within the following limits:

- a) those parts of the Atlantic and Arctic Oceans and the dependent seas which lies North of 36° north latitude and between 42° west longitude and 51° east longitude, but excluding:
 - i) the Baltic Sea and Belts lying to the south and east of lines drawn from Hasenore Head to Griben Point, from Korshage to Spodsbjerg and from Gilbjerg Head to Kullen, and
 - ii) the Mediterranean Sea and its dependent seas as far as the point of intersection of the parallel of 36° north latitude and the meridian of 5°36' west longitude;

* Reproduced from Document No.220 adopted on 21 February 1974 by the Conference on the Prevention of Marine Pollution from Land-based Sources.

The Convention has been signed by the European Economic Community, France, the United Kingdom, Spain, Portugal, Belgium, the Netherlands, the Federal Republic of Germany, Denmark, Norway, Sweden, Iceland and Luxemburg.

In accordance with the provisions of Article 25 the Convention will enter into force thirty days after deposit of the seventh instrument of ratification, approval, acceptance or accession. No such instrument has been deposited so far.

The Convention has been adopted in English and French authentic versions.

A Spanish translation has been published by J.A. de Yturriaga in "La actual revision del derecho del Mar - una perspectiva española", Madrid, 1974.

- b) that part of the Atlantic Ocean north of 59° north latitude and between 44° west longitude and 42° west longitude.

Article 3

For the purpose of the present Convention:

- a) "Maritime area" - means the high seas, the territorial seas of Contracting Parties and waters on the landward side of the base lines from which the breadth of the territorial sea is measured, extending, in the case of watercourses up to the freshwater limit unless otherwise decided under Article 16 of the present Convention;
- b) "Freshwater limit" - means the place in the water course where, at low tide and in a period of low freshwater flow, there is an appreciable increase in salinity due to the presence of sea-water;
- c) "Pollution from land-based sources" - means the pollution of the maritime area:
- i) through watercourses,
 - ii) from the coast, including introduction through under-water or other pipelines,
 - iii) from man-made structures placed under the jurisdiction of a Contracting Party within the limits of the area to which the present Convention applies.

Article 4

1. The Contracting Parties undertake:
- a) to eliminate, if necessary by stages, pollution of the maritime area from land-based sources of substances listed in Part I of Annex A to the present Convention.
 - b) to limit strictly pollution of the maritime area from land-based sources of the substances listed in Part II of Annex A to the present Convention.
2. In order to carry out the undertakings in paragraph 1 of this Article, the Contracting Parties, jointly or individually as appropriate, shall implement programmes and measures:
- a) for the elimination, as a matter of urgency, of pollution of the maritime area from land-based sources by substances listed in Part I of Annex A to the present Convention;

b) for the reduction or, as appropriate, elimination of pollution of the maritime area from land-based sources by substances listed in Part II of Annex A to the present Convention. These substances shall be discharged only after approval has been granted by the appropriate Authorities within each contracting State. Such approval shall be periodically reviewed.

3. The programmes and measures adopted under paragraph 2 above shall include, as appropriate, specific regulations or standards governing the quality of the environment, discharges into the maritime area, such discharges into watercourses as affect the maritime area, and the composition and use of substances and products and shall take into account the latest technical developments.

The programmes shall contain time-limits for their completion.

4. Furthermore, the Contracting Parties may, jointly or individually as appropriate, implement programmes or measures to forestall, reduce or eliminate pollution of the maritime area from land-based sources of substances not then listed in Annex A to the present Convention, if scientific evidence has established that a serious hazard may be created in the maritime area by that substance and if urgent action is necessary.

Article 25

1. The Contracting Parties undertake to adopt measures to forestall and, as appropriate, eliminate pollution of the maritime area from land-based sources by radio-active substances referred to in Part III of Annex A of the present Convention.

2. Without prejudice to their obligations under other Treaties and Conventions, in implementing this undertaking the Contracting Parties shall:

a) take full account of the recommendations of the appropriate international Organisations and Agencies;

b) take account of the monitoring procedures recommended by these international Organisations and Agencies; and
c) coordinate their monitoring and study of radio-active substances in accordance with Article 10 and 11 of the present Convention.

Article 6

1. With a view to preserving and enhancing the quality of the marine environment, the Contracting Parties, without prejudice to the provisions of Article 4, shall endeavour:

a) to reduce existing pollution from land-based sources;

b) to forestall any new pollution from land-based sources, including that which derives from new substances.

2. In implementing this undertaking, the Contracting Parties shall take account of:
- a) the nature and quantities of the pollutants under consideration;
 - b) the level of existing pollution;
 - c) the quality and absorptive capacity of the receiving waters of the maritime area;
 - d) the need for an integrated planning policy, consistent with the requirement of environmental protection.

Article 7

The Contracting Parties agree to apply the measures they adopt in such a way as to avoid increasing pollution:

- in the seas outside the area to which the present Convention applies;
- in the maritime area covered by the present Convention, originating otherwise than from land-based sources.

Article 8

No provision of the present Convention may be interpreted as preventing the Contracting Parties from taking more stringent measures to combat marine pollution from land-based sources.

Article 9

1. When pollution from land-based sources originating from the territory of a Contracting Party by substances not listed in Part 1 of Annex A of the present Convention is likely to prejudice the interests of one or more of the other Parties to the Convention, the Contracting Parties concerned undertake to enter into consultation, at the request of any one of them, with a view to negotiating a co-operation agreement.
2. At the request of any Contracting Party concerned, the Commission referred to in Article 15 of the present Convention shall consider the question and may make recommendations with a view to reaching a satisfactory solution.

3. The special agreements specified in Paragraph 1 of this Article may, among other things, define the areas to which they shall apply, the quality objectives to be achieved, and the methods for achieving these objectives including methods for the application of appropriate standards, and the scientific and technical information to be collected.
4. The Contracting Parties signatory to these agreements shall, through the medium of the Commission, inform the other Contracting Parties of their purport and of the progress made in putting them into effect.

Article 10

The Contracting Parties agree to establish complementary or joint programmes of scientific and technical research, including research into the best methods of eliminating or replacing noxious substances so as to reduce marine pollution from land-based sources, and to transmit to each other the information so obtained. In doing so they will have regard to the work carried out, in these fields, by the appropriate international Organizations and Agencies.

Article 11

The Contracting Parties agree to set up progressively, and to operate within the area covered by the present Convention, a permanent monitoring system allowing of:-

- the earliest possible assessment of the existing level of marine pollution;
- the assessment of the effectiveness of measures for the reduction of marine pollution from land-based sources taken under the terms of the present Convention.

For this purpose the Contracting Parties shall lay down the ways and means of pursuing individually or jointly systematic and ad hoc monitoring programmes. These programmes shall take into account the deployment of research vessels and other facilities in the monitoring area.

The programmes will take into account similar programmes pursued in accordance with Conventions already in force and by the appropriate International organisations and Agencies.

Article 12

1. Each Contracting Party undertakes to ensure compliance with the provisions of this Convention and to take in its territory appropriate measures to prevent and punish conduct in contravention of the provisions of the present Convention.

2. The Contracting Parties shall inform the Commission of the legislative and administrative measures they have taken to implement the provisions of the above paragraph.

Article 13

The Contracting Parties undertake to assist one another as appropriate to prevent incidents which may result in pollution from land-based sources, to minimize and eliminate the consequences of such incidents, and to exchange information to that end.

Article 14

1. The provisions of the present Convention may not be invoked against a Contracting Party to the extent that the latter is prevented, as a result of pollution having its origin in the territory of a non-Contracting State, from ensuring their full application.
2. However, the said Contracting Party shall endeavour to co-operate with the non-Contracting State so as to make possible the full application of the present Convention.

Articles 15-29

[These provisions are not reproduced here as they cover institutional arrangements and final provisions which, as far as the proposed Protocol is concerned, are determined by the framework Convention.]

ANNEX A

The allocation of substances to Parts I, II and III below takes account of the following criteria:

- a) persistence.
- b) toxicity or other noxious properties
- c) tendency to bio-accumulation

These criteria are not necessarily of equal importance for a particular substance or group of substances, and other factors such as the location and quantities of the discharge may need to be considered.

Part I

Substances are included in this Part

- i) because they are not readily degradable or rendered harmless by natural processes; and
 - ii) because they may either
 - a) give rise to dangerous accumulation of harmful material in the food chain, or
 - b) endanger the welfare of living organisms causing undesirable changes in the marine eco-systems, or
 - c) interfere seriously with the harvest of sea foods or with other legitimate uses of the sea; and
 - iii) because it is considered that pollution by these substances necessitates urgent action.
1. Organohalogen compounds and substances which may form such compounds in the marine environment, excluding those which are biologically harmless, or which are rapidly converted in the sea into substances which are biological harmless.
 2. Mercury and mercury compounds.
 3. Cadmium and cadmium compounds.
 4. Persistent synthetic materials which may float, remain in suspension or sink, and which may seriously interfere with any legitimate uses of the sea.
 5. Persistent oils and hydrocarbons of petroleum origin.

Part II

Substances are included in this Part because, although exhibiting similar characteristics to the substances in Part I and requiring strict control, they seem less noxious or are more readily rendered harmless by natural processes.

1. Organic compounds of phosphorous, silicon, and tin and substances which may form such compounds in the marine environment, excluding those which are biologically harmless, or which are rapidly converted in the sea into substances which are biologically harmless.
2. Elemental phosphorus.
3. Non-persistent oils and hydrocarbons of petroleum origin.
4. The following elements and their compounds.

Arsenic	Lead
Chromium	Nickel
Copper	Zinc
5. Substances which have been agreed by the Commission as having a deleterious effect on the taste and/or smell of products derived from the marine environment for human consumption.

Part III

Substances are included in this Part because, although they display characteristics similar to those of substances listed in Part I and should be subject to stringent controls with the aim of preventing and, as appropriate, eliminating the pollution which they cause, they are already the subject of research, recommendations and, in some cases, measures under the auspices of several International Organisations and Institutions.

Those substances are subject to the provisions of Article (14):

- Radioactive substances, including wastes.

ANNEX B

[This Annex which deals with the settlement of disputes is not reproduced since the proposed new Protocol will contain no provisions on this subject which is covered by the framework Convention and its Annex A.]

F. Helsinki Convention

CONVENTION
ON THE PROTECTION OF THE MARINE ENVIRONMENT OF THE
BALTIC SEA AREA
opened for signature at Helsinki on 22 March 1974*

Article 1

Convention Area

[Not reproduced as not relevant.]

Article 2

Definitions

For the purposes of the present Convention:

1. "Pollution" means introduction by man, directly or indirectly, of substances or energy into the marine environment, including estuaries, resulting in such deleterious effects as hazard to human health, harm to living resources and marine life, hindrance to legitimate uses of the sea including fishing, impairment of the quality for use of sea water, and reduction of amenities;
2. "Land-based pollution" means pollution of the sea caused by discharges from land reaching the sea waterborne, airborne or directly from the coast, including outfalls from pipelines;
3. a) "Dumping" means:
 - (i) any deliberate disposal at sea of wastes or other matter from vessels, aircraft, platforms or other man-made structures at sea;
 - (ii) any deliberate disposal at sea of vessels, aircraft, platforms or other man-made structures at sea;

* English text and French and Spanish translations reproduced as UN document A/CONF.62/C3/L.1.

The Convention which has been signed (in a single English version) by Denmark, Finland, the German Democratic Republic, the Federal Republic of Germany, Poland, Sweden and the USSR, was ratified on 27 June 1975 by the Government of Finland. It will enter into force, in accordance with Article 27, two months after the deposit of the seventh instrument of ratification or approval.

- b) "Dumping" does not include:
- (i) the disposal at sea of wastes or other matter incidental to, or derived from the normal operations of vessels, aircraft, platforms or other man-made structures at sea and their equipment, other than wastes or other matter transported by or to vessels, aircraft, platforms or other man-made structures at sea, operating for the purpose of disposal of such matter or derived from the treatment of such wastes or other matter on such vessels, aircraft, platforms or structures;
 - (ii) placement of matter for a purpose other than the mere disposal thereof, provided that such placement is not contrary to the aims of the present Convention;
4. "Vessels and aircraft" means waterborne or airborne craft of any type whatsoever. This expression includes hydrofoil boats, air-cushion vehicles, submersibles, floating craft whether self-propelled or not, and fixed or floating platforms;
 5. "Oil" means petroleum in any form including crude oil, fuel oil, sludge, oil refuse and refined products;
 6. "Harmful substance" means any hazardous, noxious, or other substance, which, if introduced into the sea, is liable to cause pollution;
 7. "Incident" means an event involving the actual or probable discharge into the sea of a harmful substance, or effluents containing such a substance.

Article 3

Fundamental principles and obligations

1. The Contracting Parties shall individually or jointly take all appropriate legislative, administrative or other relevant measures in order to prevent and abate pollution and to protect and enhance the marine environment of the Baltic Sea Area.
2. The Contracting Parties shall use their best endeavours to ensure that the implementation of the present Convention shall not cause an increase in the pollution of sea areas outside the Baltic Sea Area.

Article 4

Application

1. The present Convention shall apply to the protection of the marine environment of the Baltic Sea Area which comprises the water-body and the sea-bed including their living resources and other forms of marine life.
2. Without prejudice to the sovereign rights in regard to their territorial sea, each Contracting Party shall implement the provisions of the present Convention within its territorial sea through its national authorities.
3. While the provisions of the present Convention do not apply to internal waters, which are under the sovereignty of each Contracting Party, the Contracting Parties undertake, without prejudice to their sovereign rights, to ensure that the purposes of the present Convention will be obtained in these waters.
4. The present Convention shall not apply to any warship, naval auxiliary, military aircraft or other ship and aircraft owned or operated by a State and used, for the time being, only on government non-commercial service.

However, each Contracting Party shall ensure, by the adoption of appropriate measures not impairing the operations or operational capabilities of such ships and aircraft owned or operated by it, that such ships and aircraft act in a manner consistent, so far as is reasonable and practicable, with the present Convention.

Article 5

Hazardous substances

The Contracting Parties undertake to counteract the introduction, whether airborne, waterborne or otherwise, into the Baltic Sea Area of hazardous substances as specified in Annex I of the present Convention.

Article 6

Principles and obligations concerning land-based pollution

1. The Contracting Parties shall take all appropriate measures to control and minimize land-based pollution of the marine environment of the Baltic Sea Area.
2. In particular, the Contracting Parties shall take all appropriate measures to control and strictly limit pollution by noxious substances and materials in accordance with Annex II of the present Convention.

To this end they shall, inter alia, as appropriate co-operate in the development and adoption of specific programmes, guidelines, standards or regulations concerning discharges, environmental quality, and products containing such substances and materials and their use.

3. The substances and materials listed in Annex II of the present Convention shall not be introduced into the marine environment of the Baltic Sea Area in significant quantities without a prior special permit, which may be periodically reviewed, by the appropriate national authority.
4. The appropriate national authority will inform the Commission referred to in Article 12 of the present Convention of the quantity, quality and way of discharge if it considers that significant quantities of substances and materials listed in Annex II of the present Convention were discharged.
5. The Contracting Parties shall endeavour to establish and adopt common criteria for issuing permits for discharges.
6. To control and minimize pollution of the Baltic Sea Area by harmful substances the Contracting Parties shall, in addition to the provisions of Article 5 of the present Convention, aim at attaining the goals and applying the criteria enumerated in Annex III of the present Convention.
7. If the discharge from a watercourse, flowing through the territories of two or more Contracting Parties or forming a boundary between them, is liable to cause pollution of the marine environment of the Baltic Sea Area, the Contracting Parties concerned shall in common take appropriate measures in order to prevent and abate such pollution.
8. The Contracting Parties shall endeavour to use best practicable means in order to minimize the airborne pollution of the Baltic Sea Area by noxious substances.

Articles 7-29

[These provisions are not reproduced here as they deal with matters not to be covered by the proposed Protocol on pollution from land-based sources.]

ANNEX I

Hazardous Substances

The protection of the Baltic Sea Area from pollution by the substances listed below can involve the use of appropriate technical means, prohibitions and regulations of the transport, trade, handling, application, and final deposition of products containing such substances.

1. DDT (1,1,1-trichloro-2,2-bis-(chlorophenyl)-ethane) and its derivatives DDE and DDD.

2. PCB's (polychlorinated biphenyls).

ANNEX II

Noxious Substances and Materials

The following substances and materials are listed for the purposes of Article 6 of the present Convention.

The list is valid for substances and materials introduced as waterborne into the marine environment. The Contracting Parties shall also endeavour to use best practicable means to prevent harmful substances and materials from being introduced as airborne into the Baltic Sea Area.

A For urgent consideration

1. Mercury, cadmium, and their compounds.

B

2. Antimony, arsenic, beryllium, chromium, copper, lead, molybdenum, nickel, selenium, tin, vanadium, zinc, and their compounds, as well as elemental phosphorus.
3. Phenols and their derivatives.
4. Phthalic acid and its derivatives.
5. Cyanides.
6. Persistent halogenated hydrocarbons.
7. Polycyclic aromatic hydrocarbons and their derivatives.
8. Persistent toxic organosilicic compounds.
9. Persistent pesticides, including organophosphoric and organostannic pesticides, herbicides, slimicides and chemicals used for the preservation of wood, timber, wood pulp, cellulose, paper, hides and textiles, not covered by the provisions of Annex I of the present Convention.
10. Radioactive materials.
11. Acids, alkalis and surface active agents in high concentrations or big quantities.
12. Oil and wastes of petrochemical and other industries containing lipid-soluble substances.
13. Substances having adverse effects on the taste and/or smell of products for human consumption from the sea, or effects on taste, smell, colour, transparency or other characteristics of the water seriously reducing its amenity values.

14. Materials and substances which may float, remain in suspension or sink, and which may seriously interfere with any legitimate use of the sea.
15. Lignin substances contained in industrial waste waters.
16. The chelators EDTA (ethylenedinitrilotetraacetic acid or ethylenediaminetetraacetic acid) and DTPA (diethylenetriamino-pentaacetic acid).

ANNEX IIIGoals, Criteria and Measures Concerning the Prevention of
Land-Based Pollution

In accordance with the provisions of Article 6 of the present Convention the Contracting Parties shall endeavour to attain the goals and apply the criteria and measures enumerated in this Annex in order to control and minimize land-based pollution of the marine environment of the Baltic Sea Area.

1. Municipal sewage shall be treated in an appropriate way so that the amount of organic matter does not cause harmful changes in the oxygen content of the Baltic Sea Area and the amount of nutrients does not cause harmful eutrophication of the Baltic Sea Area.
2. Municipal sewage shall also be treated in an appropriate way to ensure that the hygienic quality, and in particular epidemiological and toxicological safety, of the receiving sea area is maintained at a level which does not cause harm to human health, and in a way that under the given composition of the sewage no significant amount of such harmful substances as are listed in Annexes I and II of the present Convention is formed.
3. The polluting load of industrial wastes shall be minimized in an appropriate way in order to reduce the amount of harmful substances, organic matter and nutrients.
4. The means referred to in Paragraph 3 of this Annex shall in particular include minimization of production of wastes by processing techniques, re-circulation and re-use of processing water, developing of water economy and improvement of qualifications for water treatment. In the treatment of waste water mechanical, chemical, biological and other measures, according to the quality of the waste water, and as required to maintain or improve the quality of the recipient water, shall be applied.
5. The discharge of cooling water from nuclear power plants or other kinds of industries using large amounts of water shall be effected in a way which minimizes the pollution of the marine environment of the Baltic Sea Area.
6. The Commission will define pollution control criteria, objectives for reduction of pollution and objectives concerning measures, including processing techniques and waste treatment, to reduce pollution of the Baltic Sea Area.

G. UN Conference on the Law of the Sea

REVISED SINGLE NEGOTIATING TEXT:
PROTECTION AND PRESERVATION OF THE MARINE ENVIRONMENT
presented by the Chairman of the Third Committee
on 6 May 1976 at the Third Conference on the Law of the Sea¹

SECTION I. GENERAL PROVISIONS

Article 1

"Pollution of the marine environment" means: the introduction by man, directly or indirectly, of substances or energy into the marine environment (including estuaries) which results or is likely to result in such deleterious effects as harm to living resources, hazards to human health, hindrance to marine activities including fishing and other legitimate uses of the sea, impairment of quality for use of sea water and reduction of amenities.²

Article 2

States have the obligation to protect and preserve the marine environment.

Article 3

States have the sovereign right to exploit their natural resources pursuant to their environmental policies and in accordance with their duty to protect and preserve the marine environment.

Article 4

1. States shall take all necessary measures consistent with this Convention to prevent, reduce and control pollution of the marine environment from any source using for this purpose the best practicable means at their disposal and in accordance with their capabilities, individually or jointly, as appropriate, and they shall endeavour to harmonize their policies in this connexion.

¹ Document A/CONF.62/WP.8/Rev.1/Part III. This text served as a basis for negotiation at the Fourth and Fifth Sessions of the Conference held at New York from 29 March to 21 May 1976 and from 2 August to 17 September 1976.

² A provision containing a definition of pollution of the marine environment together with all other definitions could be embodied in a special introductory chapter of this Convention.

2. States shall take all necessary measures to ensure that activities under their jurisdiction or control are so conducted that they do not cause damage by pollution to other States and their environment, and that pollution arising from incidents or activities under their jurisdiction or control does not spread beyond the areas where they exercise sovereign rights in accordance with this Convention.

3. The measures taken pursuant to this Chapter of the Convention shall deal with all sources whatsoever of pollution of the marine environment. These measures shall include, inter alia, those designed to minimize to the fullest possible extent:

(a) Release of toxic, harmful and noxious substances, especially those which are persistent:

- (i) from land-based sources;
- (ii) from or through the atmosphere;
- (iii) by dumping.

(b) Pollution from vessels, in particular for preventing accidents and dealing with emergencies, ensuring the safety of operations at sea, preventing intentional and unintentional discharges, and regulating the design, construction, equipment, operation and manning of vessels.

(c) Pollution from installations and devices used in the exploration or exploitation of the natural resources of the sea-bed and subsoil, in particular for preventing accidents and dealing with emergencies, ensuring the safety of operations at sea, and regulating the design, construction, equipment, operation and manning of such installations or devices.

(d) Pollution from all other installations and devices operating in the marine environment, in particular for preventing accidents and dealing with emergencies, ensuring the safety of operations at sea, and regulating the design, construction, equipment, operation and manning of such installations or devices.

4. In taking measures to prevent, reduce or control pollution of the marine environment States shall refrain from unjustifiable interference with activities in pursuance of the rights and duties of other States exercised in conformity with this Convention.

Article 5

In taking measures to prevent, reduce or control pollution of the marine environment, States shall so act as not to transfer, directly or indirectly, damage or hazards from one area to another or transform one type of pollution into another.

Article 6

1. States shall take all necessary measures to prevent, reduce and control the use of technologies under their jurisdiction or control, or the intentional or accidental introduction of species, alien or new to a particular part of the marine environment which may cause significant and harmful changes thereto.

2. This Article shall not affect the application of the provisions of the present Convention regarding the prevention, reduction and control of pollution of the marine environment.

SECTION II. GLOBAL AND REGIONAL CO-OPERATION

Article 7

States shall co-operate on a global basis and as appropriate on a regional basis, directly or through competent international organizations, global or regional, to formulate and elaborate international rules, standards and recommended practices and procedures consistent with this Convention, for the protection and preservation of the marine environment, taking into account characteristic regional features.

Article 8

A State which becomes aware of cases in which the marine environment is in imminent danger of being damaged or has been damaged by pollution shall immediately notify other States it deems likely to be affected by such damage, as well as the competent international organizations.

Article 9

In the cases referred to in Article 8 of this Part of the Convention, States in the area affected, in accordance with their capabilities, and the competent international organizations, shall co-operate, to the extent possible, in eliminating the effects of pollution and preventing or minimizing the damage. Towards that end, States shall jointly promote and develop contingency plans for responding to pollution incidents in the marine environment.

Article 10

States shall co-operate directly or through competent international organizations for the purpose of promoting studies, undertaking programmes of scientific research and encouraging the exchange of information and data

acquired about pollution of the marine environment. They shall endeavour to participate actively in regional and international programmes to acquire knowledge for the assessment of the nature and extent of pollution and the pathways and risks of, exposures to and the remedies for pollution.

Article 11

In the light of the information and data acquired pursuant to Article 10 of this Part of the Convention, States shall co-operate directly or through competent international organizations in establishing appropriate scientific criteria for the formulation and elaboration of rules, standards and recommended practices and procedures for the prevention of pollution of the marine environment.

SECTION III. TECHNICAL ASSISTANCE

Article 12

States shall directly or through competent international or regional organizations:

(a) Promote programmes of scientific, educational, technical and other assistance to developing countries for the preservation of the marine environment and the prevention of marine pollution. Such assistance shall include, inter alia:

- (i) training of scientific and technical personnel;
- (ii) facilitation of their participation in relevant international programmes;
- (iii) supply of necessary equipment and facilities;
- (iv) enhancing the capacity of developing countries to manufacture such equipment;
- (v) development of facilities for and advice on research, monitoring, educational and other programmes;

(b) Provide appropriate assistance, in particular to developing countries, for the minimization of the effects of major incidents which may cause serious pollution in the marine environment;

(c) Provide appropriate assistance, in particular to developing countries, concerning the preparation of environmental assessments.

Article 13

Developing States shall, for purposes of the prevention of pollution of the marine environment or the minimization of its effects, be granted preference in:

- (a) The allocation of appropriate funds and technical assistance facilities of international organizations, and
- (b) The utilization of their specialized services.

SECTION IV. MONITORING

Article 14

1. States shall, consistent with the rights of other States, endeavour, as far as practicable, individually or collectively through the competent international organizations to observe, measure, evaluate and analyse, by recognized methods the risks or effects of pollution of the marine environment.
2. In particular, States shall keep under surveillance the effect of any activities which they permit or in which they engage to determine whether these activities are likely to pollute the marine environment.

Article 15

States shall publish reports of the results obtained relating to risks or effects of pollution of the marine environment, or provide at appropriate intervals such reports to the competent international or regional organizations, which should make them available to all States.

SECTION V. ENVIRONMENTAL ASSESSMENT

Article 16

When States have reasonable grounds for expecting that planned activities under their jurisdiction or control may cause substantial pollution of, or significant and harmful changes to, the marine environment, they shall, as far as practicable, assess the potential effects of such activities on the marine environment and shall communicate reports of the results of such assessments in the manner provided in Article 15 of this Part of the Convention.

SECTION VI. INTERNATIONAL RULES AND NATIONAL LEGISLATION

Article 17

1. States shall establish national laws and regulations to prevent, reduce and control pollution of the marine environment from land-based sources including rivers, estuaries, pipelines and outfall structures, taking into account internationally agreed rules, standards and recommended practices and procedures.
2. States shall also take other measures as may be necessary to prevent, reduce and control pollution of the marine environment from land-based sources.
3. States shall endeavour to harmonize their national policies at the appropriate regional level.
4. States, acting in particular through competent international organizations or diplomatic conference, shall endeavour to establish global and regional rules, standards and recommended practices and procedures to prevent, reduce and control pollution of the marine environment from land-based sources, taking into account characteristic regional features, the economic capacity of developing countries and their need for economic development. Such rules, standards and recommended practices and procedures shall be re-examined from time to time as necessary.
5. Laws, regulations, measures, rules, standards and recommended practices and procedures referred to in paragraphs 1, 2 and 4 respectively shall include those designed to minimize to the fullest possible extent the release of toxic, harmful and noxious substances, especially persistent substances, into the marine environment.

Article 18

1. Coastal States shall establish national laws and regulations to prevent, reduce and control pollution of the marine environment arising from sea-bed activities subject to their jurisdiction and from artificial islands, installations and structures under their jurisdiction, pursuant to Articles . . . of Part II of this Convention.
2. States shall also take other measures as may be necessary to prevent, reduce and control such pollution.
3. Such laws, regulations and measures shall be no less effective than international rules, standards and recommended practices and procedures.
4. States shall endeavour to harmonize their national policies at the appropriate regional level.
5. States, acting in particular through competent international organizations or diplomatic conference, shall establish global and regional rules, standards and recommended practices and procedures to prevent, reduce and control pollution of the marine environment arising in connexion with sea-bed activities

subject to their jurisdiction and from artificial islands, installations and structures under their jurisdiction referred to in paragraph 1. Such rules, standards and recommended practices and procedures shall be re-examined from time to time as necessary.

Article 19

States, acting in accordance with the provisions of Part One of this Convention, shall establish rules, standards and recommended practices and procedures to prevent, reduce and control pollution of the marine environment from activities concerning exploration and exploitation of the international sea-bed area. Such rules, standards and recommended practices and procedures shall be re-examined from time to time as necessary.

Article 20

1. States shall establish national laws and regulations to prevent, reduce and control pollution of the marine environment from dumping of wastes and other matter.¹
2. States shall also take other measures as may be necessary to prevent, reduce and control such pollution.
3. Such laws, regulations and measures shall ensure that dumping is not carried out without the permission of the competent authorities of States.
4. States, acting in particular through competent international organizations or diplomatic conference, shall endeavour to establish global and regional rules, standards and recommended practices and procedures to prevent, reduce and control pollution of the marine environment by dumping of wastes and other matter. Such rules, standards and recommended practices and procedures shall be re-examined from time to time as necessary.
5. Dumping of wastes and other matter, within the territorial sea and the economic zone or onto the continental shelf shall not be carried out without the express prior approval of the coastal State, which has the right to permit, regulate and control such dumping after due consultation with other States which by reason of their geographical situation may be adversely affected thereby.
6. National laws, regulations and measures shall be no less effective in preventing, reducing and controlling pollution from dumping than global rules and standards.

¹ The following article will be included at the appropriate place to be decided on by the Drafting Committee:

"For the purposes of this Convention, the term 'dumping' is construed in the context of the Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matter, done at London on 29 December 1972."

Article 21

1. States, acting through the competent international organization or general diplomatic conference, shall establish international rules and standards for the prevention, reduction and control of pollution of the marine environment from vessels. Such rules and standards shall, in the same manner, be re-examined from time to time as necessary.
2. States shall establish laws and regulations for the prevention, reduction and control of pollution of the marine environment from vessels flying their flag or of their registry. The requirements of such laws and regulations shall be no less effective than the international rules and standards established through the competent international organization or general diplomatic conference.
3. Coastal States may, in the exercise of their sovereignty within their territorial sea, establish national laws and regulations for the prevention, reduction and control of marine pollution from vessels. In establishing such laws and regulations, coastal States shall, in accordance with Article 21 of Part Two of the Convention, not interrupt or hamper the innocent passage of foreign vessels.
4. Coastal States, for the purpose of enforcement as provided for in Section VII of this Chapter of the Convention, may in respect of their economic zones establish laws and regulations for the prevention, reduction and control of pollution from vessels conforming to and giving effect to international rules and standards established through the competent international organization or general diplomatic conference.
5. Where international rules and standards are inadequate to meet special circumstances and where coastal States have reasonable grounds for believing that a particular, clearly defined area of its economic zone is an area where, for recognized technical reasons in relation to its oceanographical and ecological conditions, as well as its utilization or the protection of its resources, and the particular character of its traffic, the adoption of special mandatory methods for the prevention of pollution from vessels is required, coastal States may for that special area, after appropriate consultations with any other countries concerned, establish laws and regulations for the prevention, reduction and control of pollution from vessels, implementing such rules and standards or navigational practices as have been made applicable by the competent international organization for special areas. Coastal States shall publish the limits of any such particular, clearly defined area, and shall notify the competent international organization of its laws and regulations, submitting scientific and technical evidence in support, and information on such necessary land-based reception facilities which have been established. Such laws and regulations shall not become applicable in relation to foreign vessels until twelve months after notification to the competent international organization, and provided the organization does not within that period determine that the conditions in that area do not correspond to the requirements set out above.

Article 22

1. States shall, within air space under their sovereignty or with regard to vessels or aircraft flying their flag or of their registry, establish national laws and regulations to prevent, reduce and control pollution of the marine environment from or through the atmosphere, taking into account internationally agreed rules, standards and recommended practices and procedures.
2. States shall also take other measures as may be necessary to prevent, reduce and control such pollution.
3. States, acting in particular through competent international organizations or diplomatic conference shall endeavour to establish global and regional rules, standards and recommended practices and procedures to prevent, reduce and control pollution of the marine environment from or through the atmosphere.

SECTION VII. ENFORCEMENT

Article 23

States shall enforce their laws and regulations established in accordance with the provisions of this Convention and shall adopt the necessary legislative, administrative and other measures to implement applicable international rules and standards established through competent international organizations or diplomatic conference for the protection and preservation of the marine environment from land-based sources of marine pollution.

[Articles 24-47 which deal with enforcement of pollution from other than land-based sources, responsibility and liability, sovereign immunity, relation to other Conventions and settlement of disputes, have been omitted since these points will not be covered by the Protocol on land-based pollution but by the framework Convention or by other Protocols.]

H. Council of Europe - Draft

DRAFT EUROPEAN CONVENTION FOR THE
PROTECTION OF INTERNATIONAL WATERCOURSES AGAINST POLLUTION
transmitted by the Committee of Ministers
to the Consultative Assembly on 4 April 1974*

Article 1

For the purposes of this Convention:

- (a) "international watercourse" means any watercourse, canal or lake which separates or passes through the territories of two or more States;
- (b) "estuary" means the part of a watercourse between the freshwater limit and the baseline of the territorial sea;
- (c) "freshwater limit" means the place in the watercourse where, at low tide and in a period of low freshwater flow there is an appreciable increase in salinity due to the presence of sea water;
- (d) "water pollution" means any impairment of the composition or state of water, resulting directly or indirectly from human agency, in particular to the detriment of:
 - its use for human and animal consumption;
 - its use in industry and agriculture;
 - the conservation of the natural environment, particularly of aquatic flora and fauna.

Article 2

Each Contracting Party shall endeavour to take, in respect of all surface waters in its territory, all measures appropriate for the reduction of existing water pollution and for the prevention of new forms of such pollution.

* Reproduced from Council of Europe Document 3417 (issued also as document EXP/Eau(74)6 Addendum I). A draft Explanatory Report to the Convention was issued as an Addendum to Document 3417 (and as document EXP/Eau(74)6 Addendum II). Both the Document and the Addendum were issued in English and French, which will be the authentic languages of the Convention.

Article 3

1. Each Contracting Party undertakes, with regard to international watercourses, to take:

- (a) all measures required to prevent new forms of water pollution or any increase in the degree of existing water pollution;
- (b) measures aiming at the gradual reduction of existing water pollution.

2. This Convention is not to lead to the replacement of existing measures by measures giving rise to increased pollution.

Article 4

1. Each Contracting Party shall take all measures appropriate for maintaining the quality of the waters of international watercourses at, or for raising it to, a level not lower than:

- (a) the specific standards referred to in Article 15, paragraph 2; or
- (b) in the absence of such specific standards, the minimum standards laid down in Appendix I to this Convention, subject to any derogation provided for in paragraph 3 of the present Article.

2. The minimum standards laid down in Appendix I shall be applied:

- (a) in the case of freshwater standards, at the freshwater limit and at each point upstream from this limit where the watercourse is crossed by a frontier between States;
- (b) in the case of brackish water standards, at the baseline of the territorial sea and at the points where the estuary is crossed by a frontier between States.

3. Derogations to the application of Appendix I at the points fixed by the previous paragraph are authorised for the watercourses and the parameters listed in Appendix IV to this Convention. The Contracting Parties riparian to such a watercourse shall co-operate with each other in accordance with the provisions of Article 10.

Article 5

1. The discharge into the waters of international hydrographic basins of any of the dangerous or harmful substances listed in Appendix II to this Convention shall be prohibited or restricted under the conditions provided for in that Appendix.

2. In so far as a Contracting Party cannot immediately give effect to the provisions of the preceding paragraph, it shall take steps to comply with them in a reasonable time.

Article 6

1. The provisions of Articles 3 and 4 may not be invoked against a Contracting Party to the extent that the latter is prevented, as a result of water pollution having its origin in the territory of a non-Contracting State from ensuring their full application.

2. However, the said Contracting Party shall endeavour to co-operate with the non-Contracting State so as to make possible the full application of these provisions.

Article 7

1. Each Contracting Party shall communicate to the Secretary General of the Council of Europe every five years a written statement of the measures which it has taken to implement Articles 2 to 5 inclusive and of the results achieved.

2. The Secretary General shall notify the other Contracting Parties of the information received from each of them and shall forward such information to the Committee of Ministers of the Council of Europe.

Article 8

The Contracting Parties undertake to co-operate with each other with a view to achieving the aims of this Convention.

Article 9

The Contracting Parties riparian to an international watercourse to which the minimum standards laid down in Appendix I to this Convention are to be applied and the waters of which do not yet meet the level of these standards shall advise each other of the measures they have taken with a view to reaching, within a fixed time-limit, this level at the points fixed by Article 4, paragraph 2.

Article 10

1. The Contracting Parties situated either upstream or downstream of a point on an international watercourse at which the derogations provided for in Article 4 paragraph 3, apply shall carry out, in consultation with each other and before the end of the first year after this Convention enters into force in respect of them, an enquiry with a view to establishing the quality of the waters at this point as regards the parameters covered by the derogation.

2. The Contracting Parties riparian to such a watercourse shall jointly establish a programme designed to achieve, within a fixed time-limit, certain objectives for reducing pollution at the point referred to in the preceding paragraph. This programme may envisage various stages each reaching intermediate objectives. A comparison shall be effected between the objectives envisaged and the results obtained at the expiration of the fixed time-limits.

3. If the enquiry or the results mentioned in the preceding paragraphs show that it is no longer necessary to maintain the derogation as regards one of the parameters, the Contracting Party which requested the derogation shall notify the Secretary General of the Council of Europe of its suppression as regards that parameter.

Article 11

As soon as a sudden increase in pollution is recorded, the Contracting Parties riparian to the same watercourse shall immediately warn each other, and shall take unilaterally or jointly all measures in their power to avert injurious consequences or to limit the extent thereof, having recourse to the early warning system envisaged in Article 15, paragraph 1(c), if any.

Article 12

1. The Contracting Parties whose territories the same international watercourse separates or passes through hereinafter called "the interested Contracting Parties", undertake to enter into negotiations with each other, if one of them so requests, with a view to concluding a cooperation agreement or to adapting existing co-operation agreements to the provisions of this Convention.

2. When the interested Contracting Parties admit expressly or tacitly that the contribution of one of them to the pollution of the international watercourse can be deemed negligible, the latter Contracting Party is not bound to enter into negotiations in conformity with the preceding paragraph. Likewise, when the pollution of one section of an international watercourse by another section situated upstream on the same watercourse can be deemed negligible, the Contracting Parties riparian to one or the other of these two sections are not bound to enter into negotiations with regard to the watercourse as a whole.

Article 13

If an interested Contracting Party does not enter into negotiations within a reasonable time, any interested Contracting Party may inform the Committee of Ministers of the Council of Europe which shall then hold itself at the disposal of the interested Contracting Parties in order to find a procedure for reaching a satisfactory solution. The same shall apply if the negotiations, once begun, do not reach a positive conclusion within a reasonable time.

Article 14

1. The co-operation agreement referred to in Article 12 of this Convention shall, unless the interested Contracting Parties decide otherwise, provide for the establishment of an international commission and lay down its organization, its modes of operating and, if necessary, the rules for financing it.
2. The co-operation agreement shall, where appropriate, provide that any existing commission or commissions shall be assigned the functions provided for in Article 15.
3. Where two or more international commissions exist for the protection against pollution of the waters of the international watercourses of the same hydrographic basin, the interested Contracting Parties undertake to co-ordinate their activities in order to improve the protection of the waters of this basin.

Articles 15

1. Each international commission for water protection shall have inter alia the following functions:
 - (a) to collect and to verify at regular intervals data concerning the quality of the water of the international watercourse;
 - (b) to propose, if necessary, that the interested Contracting Parties carry out or have carried out any additional investigation to establish the nature, degree and source of pollution; the commission may also decide to undertake certain studies itself;
 - (c) to propose to the interested Contracting Parties that an early warning system be set up for serious accidental pollution;
 - (d) to propose to the interested Contracting Parties any additional measures that it considers useful;
 - (e) to study, at the request of the interested Contracting Parties, the advisability and, if necessary, the methods of jointly financing large-scale projects concerning water pollution control;

- (f) to propose to the interested Contracting Parties the enquiries and the programmes and objectives for reducing pollution mentioned in Article 10 concerning the international watercourses for which a derogation has been made pursuant to Article 4, paragraph 3.

2. In compliance with the general aims defined in Articles 2, 3, 4 and 5, each international commission shall, if it deems it necessary, propose to the interested Contracting Parties the assignment of the international water-course under its authority, or one or more of its sections, to one or more of the possible uses of the water-course. According to these uses and in conformity with the provisions of Article 17, the commission shall elaborate specific standards of water quality as well as the ways and means of applying them, and shall propose these for adoption by the interested Contracting Parties.

Article 16

1. Each interested Contracting Party shall have one vote in any international commission of which it is a member, unless the co-operation agreement provides otherwise.

2. The co-operation agreement may provide that a proposal adopted by a unanimous decision of the commission shall be binding on each member State, unless it informs the commission within a period to be fixed by the latter that it does not approve of the proposal or is unable to express an opinion thereon.

Article 17

1. The specific standards referred to in Article 15, paragraph 2 shall be adapted to the various possible uses of the international watercourse, such as:

- (a) production of drinking water for human consumption;
- (b) consumption by domestic and wild animals;
- (c) conservation of wild life, both flora and fauna, and securing conditions in which they thrive, and the conservation of the self-purifying capacity of water;
- (d) fishing;
- (e) recreational amenities, with due regard to health and aesthetic requirements;
- (f) the application of freshwater directly or indirectly to land for agricultural purposes;

- (g) production of water for industrial purposes;
- (h) the need to preserve an acceptable quality of sea water.

2. These specific standards shall be determined taking into account the quality limits for each use as set out in Appendix III to this Convention and in particular must be at a level which ensures that the quality of the water of the watercourse or of the section thereof which has been assigned to the use is of a level at least equal to that of those quality limits in Appendix III which are of an imperative nature.

Article 18

Each interested Contracting Party undertakes to furnish to the international commissions of which it is a member the necessary facilities for the accomplishment of their tasks.

Article 19

1. Each interested Contracting Party shall take all legislative and administrative measures necessary for the implementation of the undertakings which it has accepted under co-operation agreements.

2. Such undertakings may in no case be interpreted to prevent a Contracting Party from taking, as far as it is concerned, stricter or more effective measures.

Article 20

The co-operation agreement may make provision for a procedure which, set in motion at the request of any Contracting State, would permit a satisfactory solution to be reached when:

- (a) the international commission has not reached agreement on the adoption of a proposal;
- (b) a Contracting State has not approved, within a reasonable time, a proposal submitted to it by the international commission of which it is a member.

Article 21

The provisions of this Convention shall not affect the rules applicable under general international law to any liability of States for damage caused by water pollution.

Articles 22 to 31

[Omitted since dealing with dispute settlement and final provisions not relevant to the Protocol under consideration.]

APPENDIX I*Minimum standards for international watercourses
referred to in Article 4, paragraph 1 (b)

If the states riparian to an international watercourse unanimously agree that the standards in this Appendix are satisfied, it shall not be necessary to take regular measurements.

If, according to the findings of one of the riparian States concerned, there is reason to believe that the limits in this Appendix have been exceeded, arrangements should be made during a trial period of 12 months for analyses whose frequency, timing and methods shall be fixed or standardised.

In order to ensure that the results are sufficiently representative from the statistical point of view, the number of samples taken during that period should not be less than 26.

The standards in this Appendix shall be regarded as not satisfied if, during the 12 trial months:

- (a) more than 10% of the samples in the case of those taken at intervals,
- (b) more than 5% of samples resulting from continuous sampling of 5% of the results of continuous monitoring

exceed the limits in this Appendix, unless such excess can be regarded as due to exceptional circumstances (e.g. short heavy showers, accidents, situations connected with the natural geological condition of a watercourse, exceptionally low water levels, etc.).

Exceptionally low water levels mean those which are below the MNQ as defined below and which continue for a period of more than thirty consecutive days. Where the MNQ for a given watercourse is not known, exceptionally low water levels shall be defined by agreement between the riparian states. For the purposes of this Appendix, the MNQ is the arithmetical mean of the daily minima expressed as m^3/s of each year of a period which must include at least the last ten years.

* The table attached to this Appendix and the related footnotes are reproduced from the revised version issued as document EXP/Eau (75) 1 on 1 January 1975

	FRESH WATER	BRACKISH WATER
Temperature	28°C (1)	28°C (1)
pH	6.5 - 8.5 (2)	6.5 - 8.5 (2)
% O ₂ of saturation	day and night average > 50% (minimum observable at any time: 30% at 28°C)	
BOD ₅ 20°C	< 8 mg/l	< 8 mg/l
TOC	limit to be determined under procedure Art. 29	
Biological assessment tests of water quality	to be determined under procedure Art.29	
Cl (3)	< 250 mg/l	
SO ₄ (3)	< 150 mg/l	
NH ₄ (4)	< 2 mg/l	
P (total)	< 1 mg/l	< 1 mg/l
Phenols and homologues	< 0.04 mg/l	< 0.04 mg/l
Colour	no abnormal colouring 50-100 mg/l on the platinum-cobalt scale	
Odour	no odour after dilution to 1/100	
Oils and grease	no trace visible to the naked eye; parameter to be specified under procedure of Art.29	
KMnO ₄ in mg O ₂ /l	< 15 mg/l	
N total (Kjeldahl) (4) organic and ammoniacal (excluding NO ₂ and NO ₃)	< 3 mg/l	
Detergents (non-ionic and anionic)	The anionic surface-active agent measures as active methylene blue and expressed as TBS or Marlome A, and the non-ionic surface-active agent expressed as nonylphenol ethoxyl at 10 mol ethylene oxide, shall together not exceed 0.5 mg/l (reference substance: Marlophen 810)	
Radio-active substances	limit to be determined under procedure of Art.29	
COD	limit to be determined under procedure Art.29	
Cyanide	< 0.05 mg/l	

- (1) Excluding watercourses following in regions having a Mediterranean climate.
In industrialised Mediterranean countries when the normal temperature approaches 28°C and under low flow conditions, the maximum observable should not exceed 30°C.
- (2) Excluding phenomena due to photosynthesis.
- (3) Applies only when sea water is absent.
- (4) Does not apply at the freshwater limit.

APPENDIX IIDangerous or harmful substances
referred to in Article 5List A

Any discharge into the waters of international hydrographic basins which is liable to contain a substance appearing on the following list shall be subject to previous administrative authorisation by the competent authority of the state responsible for the waters in question. Such authorisation may be granted only if, by the application of the best possible technical methods, that substance is reduced to a level free from danger and if the discharge is strictly monitored. If a particular use has been fixed in accordance with the provisions of Article 15, paragraph 2 of the Convention this non-dangerous threshold shall take account of this use. Such authorisation may be granted for a limited period only. If the best possible technical methods do not suffice to reduce the substance to such a level, the discharge shall be prohibited.

- Persistent organohalogenic compounds and substances that may form such compounds in water;
- Persistent toxic organosilicic compounds;
- Organophosphoric compounds)
- Organostannic compounds) with the exception of any in these classes which are quickly transformed in water into biologically harmless substances;
- Substances proved to have carcinogenic effects in or through water;
- Mercury and its compounds;
- Cadmium and its compounds.

List B

1. The discharge into the waters of international hydrographic basins of the substances listed below shall be subject to regulation by the competent national authorities with a view to severe limitation of such discharge, inter alia in order to ensure compliance with the quality standards applicable under the Convention to the waters in question, taking into account the use to which they may have been assigned in accordance with the provision of Article 15, paragraph 2 of the Convention.

- The following metals and metalloids and their compounds:

zinc	lead	molybdenum	vanadium
copper	selenium	tin	beryllium
nickel	arsenic	barium	uranium
chromium	antimony	titanium	

2. The discharge into the waters of international hydrographic basins of the substances listed below shall be kept under constant surveillance by the competent national authorities, who, where necessary and by appropriate means, shall severely limit such discharge, inter alia in order to ensure compliance with the quality standards applicable under the Convention to the waters in question, taking into account the use to which they may have been assigned in accordance with the provisions of Article 15, paragraph 2 of the Convention.

- Biocides and their derivatives which do not appear on List A;
- Substances having a serious adverse effect on taste and smell;
- Substances which because of hitherto unknown, new or extended uses are found to have a serious adverse effect on the quality of surface water and any new substances which may be developed and used in such a way as to represent a serious threat to the quality of surface water.

APPENDIX III

Quality limits for international watercourses
according to their possible uses,
as referred to in Article 17, paragraph 2

The specific standards laid down by international commissions in pursuance of Article 17, paragraph 2 of the Convention must be at a level at least equal to that of the imperative quality limits set out in this Appendix, depending on the use to which the international watercourse is assigned. They may exceed those quality limits that are merely recommended.

If the states bordering on an international watercourse unanimously agree that the standards thus laid down by the international commission are satisfied, it shall not be necessary to take regular measurements.

If, according to the findings of one of the states concerned, there is reason to believe that these levels have been exceeded, arrangements should be made during a trial period of 12 months for analyses whose frequency, timing and methods shall be fixed or standardised.

In order to ensure that the results are sufficiently representative from the statistical point of view, the number of samples taken during that period should not be fewer than 26.

The specific standards shall be regarded as not satisfied if, during the 12 trial months:

- (a) more than 10% of the samples in the case of those taken at intervals,
- (b) more than 5% of the samples resulting from continuous sampling, or 5% of the findings of continuous monitoring,

fail to comply with the standards laid down by the international commission unless such failure may be regarded as due to exceptional circumstances (e.g. short, heavy downpours, accidents, situations connected with the natural geological conditions of a watercourse, exceptionally low water levels, etc.).

Exceptionally low water levels shall be taken to mean levels which are below the MNQ as defined below and which continue for a period of more than 30 consecutive days. When the MNQ for a given watercourse is not known, exceptionally low water level shall be defined by agreement between the riparian states. For the purposes of this Appendix, the MNQ is the arithmetical mean of the daily minima expressed in cubic metres for each year of a period which must include at least the last ten years.

[A further table establishing qualities for producing drinking water, as well as Appendices listing watercourses subject to derogations and dealing with arbitration have been omitted since they appear of no relevance to the drafting of the Protocol under consideration.]

I. European Communities

COUNCIL DIRECTIVE OF 4 MAY 1976 ON POLLUTION
CAUSED BY CERTAIN DANGEROUS SUBSTANCES DISCHARGED
INTO THE AQUATIC ENVIRONMENT OF THE COMMUNITY
published in Official Journal No. L 129
of 18 May 1976

(76/464/EEC)

THE COUNCIL OF THE EUROPEAN COMMUNITIES

Having regard to the Treaty establishing the European Economic Community, and in particular Articles 100 and 235 thereof,

Having regard to the proposal from the Commission,

Having regard to the opinion of the European Parliament,¹

Having regard to the opinion of the Economic and Social Committee,²

Whereas there is an urgent need for general and simultaneous action by the Member States to protect the aquatic environment of the Community from pollution, particularly that caused by certain persistent, toxic and bioaccumulable substances;

Whereas several conventions or draft conventions, including the Convention for the prevention of marine pollution from land-based sources, the draft Convention for the protection of the Rhine against chemical pollution and the draft European Convention for the protection of international watercourses against pollution, are designed to protect international watercourses and the marine environment from pollution; whereas it is important to ensure the coordinated implementation of these conventions;

Whereas any disparity between the provisions on the discharge of certain dangerous substances into the aquatic environment already applicable or in preparation in the various Member States may create unequal conditions of competition and thus directly affect the functioning of the common market; whereas it is therefore necessary to approximate laws in this field, as provided for in Article 100 of the Treaty;

Whereas it seems necessary for this approximation of laws to be accompanied by Community action so that one of the aims of the Community in the sphere of protection of the environment and improvement of the quality of life can be achieved by more extensive rules; whereas certain specific provisions to this effect should therefore be laid down; whereas Article 235 of the Treaty should be invoked as the powers required for this purpose have not been provided for by the Treaty;

¹ OJ No. C 5, 8.1.1975, p. 62.

² OJ No. C 108, 15.5.1975, p. 76.

Whereas the programme of action of the European Communities on the environment,¹ provides for a number of measures to protect fresh water and sea-water from certain pollutants;

Whereas in order to ensure effective protection of the aquatic environment of the Community, it is necessary to establish a first list, called List I, of certain individual substances selected mainly on the basis of their toxicity, persistence, and bioaccumulation, with the exception of those which are biologically harmless or which are rapidly converted into substances which are biologically harmless, and a second list, called List II, containing substances which have a deleterious effect on the aquatic environment, which can, however, be confined to a given area and which depend on the characteristics and location of the water into which they are discharged; whereas any discharge of these substances should be subject to prior authorization which specifies emission standards;

Whereas pollution through the discharge of the various dangerous substances within List I must be eliminated; whereas the Council should, within specific time limits and on a proposal from the Commission, adopt limit values which the emission standards should not exceed, methods of measurement, and the time limits with which existing dischargers should comply;

Whereas the Member States should apply these limit values, except where a Member State can prove to the Commission, in accordance with a monitoring procedure set up by the Council, that the quality objectives established by the Council, on a proposal from the Commission, are being met and continuously maintained throughout the area which might be affected by the discharges because of the action taken, among others, by that Member State;

Whereas it is necessary to reduce water pollution caused by the substances within List II; whereas to this end the Member States should establish programmes which incorporate quality objectives for water drawn up in compliance with Council Directives where they exist; whereas the emission standards applicable to such substances should be calculated in terms of these quality objectives;

Whereas, subject to certain exceptions and modifications, this Directive should be applied to discharges into ground water pending the adoption of specific Community rules in the matter;

Whereas one or more Member States may be able, individually or jointly, to take more stringent measures than those provided for under this Directive;

Whereas an inventory of discharges of certain particularly dangerous substances into the aquatic environment of the Community should be drawn up in order to know where they originated;

Whereas it may be necessary to revise and, where required, supplement Lists I and II on the basis of experience, if appropriate, by transferring certain substances from List II to List I,

¹ OJ No. C 112, 20.12.1973, p. 1.

HAS ADOPTED THIS DIRECTIVE:

Article 1

1. Subject to Article 8, this Directive shall apply to:
 - inland surface water,
 - territorial waters,
 - internal coastal waters,
 - ground water.
2. For the purposes of this Directive:
 - (a) 'inland surface water' means all static or flowing fresh surface water situated in the territory of one or more Member States;
 - (b) 'internal coastal waters' means waters on the landward side of the base line from which the breadth of territorial waters is measured, extending, in the case of watercourses, up to the fresh-water limit;
 - (c) 'fresh-water limit' means the place in the watercourse where, at low tide and in a period of low fresh-water flow, there is an appreciable increase in salinity due to the presence of sea-water;
 - (d) 'discharge' means the introduction into the waters referred to in paragraph 1 of any substances in List I or List II of the Annex, with the exception of:
 - discharges of dredgings,
 - operational discharges from ships in territorial waters,
 - dumping from ships in territorial waters;
 - (e) 'pollution' means the discharge by man, directly or indirectly, of substances or energy into the aquatic environment, the results of which are such as to cause hazards to human health, harm to living resources and to aquatic ecosystems, damage to amenities or interference with other legitimate uses of water.

Article 2

Member States shall take the appropriate steps to eliminate pollution of the waters referred to in Article 1 by the dangerous substances in the families and groups of substances in List I of the Annex and to reduce pollution of the said waters by the dangerous substances in the families and groups of substances in List II of the Annex, in accordance with this Directive, the provisions of which represent only a first step towards this goal.

Article 3

With regard to the substances belonging to the families and groups of substances in List I, hereinafter called 'substances within List I':

1. all discharges into the waters referred to in Article 1 which are liable to contain any such substance shall require prior authorization by the competent authority of the Member State concerned;
2. the authorization shall lay down emission standards with regard to discharges of any such substance into the waters referred to in Article 1 and, where this is necessary for the implementation of this Directive, to discharges of any such substance into sewers;
3. in the case of existing discharges of any such substance into the waters referred to in Article 1, the dischargers must comply with the conditions laid down in the authorization within the period stipulated therein. This period may not exceed the limits laid down in accordance with Article 6(4);
4. authorizations may be granted for a limited period only. They may be renewed, taking into account any changes in the limit values referred to in Article 6.

Article 4

1. Member States shall apply a system of zero-emission to discharges into ground water of substances within List I.
2. Member States shall apply to ground water the provisions of this Directive relating to the substances belonging to the families and groups of substances in List II, hereinafter called 'substances within List II'.
3. Paragraphs 1 and 2 shall apply neither to domestic effluents nor to discharges injected into deep, saline and unusable strata.
4. The provisions of this Directive relating to ground water shall no longer apply upon the implementation of a separate Directive on ground water.

Article 5

1. The emission standards laid down in the authorizations granted pursuant to Article 3 shall determine:
 - (a) the maximum concentration of a substance permissible in a discharge. In the case of dilution the limit value provided for in Article 6(1)(a) shall be divided by the dilution factor;

- (b) the maximum quantity of a substance permissible in a discharge during one or more specified periods of time. This quantity may, if necessary, also be expressed as a unit of weight of the pollutant per unit of the characteristic element of the polluting activity (e.g. unit of weight per unit of raw material or per producer unit).
2. For each authorization, the competent authority of the Member State concerned may, if necessary, impose more stringent emission standards than those resulting from the application of the limit values laid down by the Council pursuant to Article 6, taking into account in particular the toxicity, persistence, and bioaccumulation of the substance concerned in the environment into which it is discharged.
3. If the discharger states that he is unable to comply with the required emission standards, or if this situation is evident to the competent authority in the Member State concerned, authorization shall be refused.
4. Should the emission standards not be complied with, the competent authority in the Member State concerned shall take all appropriate steps to ensure that the conditions of authorization are fulfilled and, if necessary, that the discharge is prohibited.

Article 6

1. The Council, acting on a proposal from the Commission, shall lay down the limit values which the emission standards must not exceed for the various dangerous substances included in the families and groups of substances within List I. These limit values shall be determined by:

- (a) the maximum concentration of a substance permissible in a discharge, and
- (b) where appropriate, the maximum quantity of such a substance expressed as a unit of weight of the pollutant per unit of the characteristic element of the polluting activity (e.g. unit of weight per unit of raw material or per product unit).

Where appropriate, limit values applicable to industrial effluents shall be established according to sector and type of product.

The limit values applicable to the substances within List I shall be laid down mainly on the basis of:

- toxicity,
- persistence,
- bioaccumulation,

taking into account the best technical means available.

2. The Council, acting on a proposal from the Commission, shall lay down quality objectives for the substances within List I.

These objectives shall be laid down principally on the basis of the toxicity, persistence and accumulation of the said substances in living organisms and in sediment, as indicated by the latest conclusive scientific data, taking into account the difference in characteristics between salt-water and fresh water.

3. The limit values established in accordance with paragraph 1 shall apply except in the cases where a Member State can prove to the Commission, in accordance with a monitoring procedure set up by the Council on a proposal from the Commission, that the quality objectives established in accordance with paragraph 2, or more severe Community quality objectives, are being met and continuously maintained throughout the area which might be affected by the discharges because of the action taken, among others, by that Member State.

The Commission shall report to the Council the instances where it has had recourse to the quality objectives method. Every five years the Council shall review, on the basis of a Commission proposal and in accordance with Article 148 of the Treaty, the instances where the said method has been applied.

4. For those substances included in the families and groups of substances referred to in paragraph 1, the deadlines referred to in point 3 of Article 3 shall be laid down by the Council in accordance with Article 12, taking into account the features of the industrial sectors concerned and, where appropriate, the types of products.

Article 7

1. In order to reduce pollution of the waters referred to in Article 1 by the substances within List II, Member States shall establish programmes in the implementation of which they shall apply in particular the methods referred to in paragraphs 2 and 3.

2. All discharges into the waters referred to in Article 1 which are liable to contain any of the substances within List II shall require prior authorization by the competent authority in the Member State concerned, in which emission standards shall be laid down. Such standards shall be based on the quality objectives, which shall be fixed as provided for in paragraph 3.

3. The programmes referred to in paragraph 1 shall include quality objectives for water; these shall be laid down in accordance with Council Directives, where they exist.

4. The programmes may also include specific provisions, governing the composition and use of substances or groups of substances and products and shall take into account the latest economically feasible technical developments.

5. The programmes shall set deadlines for their implementation.

6. Summaries of the programmes and the results of their implementation shall be communicated to the Commission.

7. The Commission, together with the Member States, shall arrange for regular comparisons of the programmes in order to ensure sufficient coordination in their implementation. If it sees fit, it shall submit relevant proposals to the Council to this end.

Article 8

Member States shall take all appropriate steps to implement measures adopted by them pursuant to this Directive in such a way as not to increase the pollution of waters to which Article 1 does not apply. They shall in addition prohibit all acts which intentionally or unintentionally circumvent the provisions of this Directive.

Article 9

The application of the measures taken pursuant to this Directive may on no account lead, either directly or indirectly, to increased pollution of the waters referred to in Article 1.

Article 10

Where appropriate, one or more Member States may individually or jointly take more stringent measures than those provided for under this Directive.

Article 11

The competent authority shall draw up an inventory of the discharges into the waters referred to in Article 1 which may contain substances within List I to which emission standards are applicable.

Article 12

1. The Council, acting unanimously, shall take a decision within nine months on any Commission proposal made pursuant to Article 6 and on the proposals concerning the methods of measurement applicable.

Proposals concerning an initial series of substances as well as the methods of measurement applicable and the deadlines referred to in Article 6(4) shall be submitted by the Commission within a maximum period of two years following notification of this Directive.

2. The Commission shall, where possible within 27 months following notification of this Directive, forward the first proposals made pursuant to Article 7(7). The Council, acting unanimously, shall take a decision within nine months.

Article 13

1. For the purposes of this Directive, Member States shall supply the Commission, at its request to be submitted in each case, with all the necessary information, and in particular:

- details of authorizations granted pursuant to Article 3 and Article 7(2),
- the results of the inventory provided for in Article 11,
- the results of monitoring by the national network,
- additional information on the programmes referred to in Article 7.

2. Information acquired as a result of the application of this Article shall be used only for the purpose for which it was requested.

3. The Commission and the competent authorities of the Member States, their officials and other servants shall not disclose information acquired by them pursuant to this Directive and of a kind covered by the obligation of professional secrecy.

4. The provisions of paragraphs 2 and 3 shall not prevent publication of general information or surveys which do not contain information relating to particular undertakings or associations of undertakings.

Article 14

The Council, acting on a proposal from the Commission, which shall act on its own initiative or at the request of a Member State, shall revise and, where necessary, supplement Lists I and II on the basis of experience, if appropriate, by transferring certain substances from List II to List I.

Article 15

This Directive is addressed to the Member States.

Done at Brussels, 4 May 1976.

For the Council

The President

G. THORN

ANNEX

List I of families and groups of substances

List I contains certain individual substances which belong to the following families and groups of substances, selected mainly on the basis of their toxicity, persistence and bioaccumulation, with the exception of those which are biologically harmless or which are rapidly converted into substances which are biologically harmless:

1. organohalogen compounds and substances which may form such compounds in the aquatic environment,
2. organophosphorus compounds,
3. organotin compounds,
4. substances in respect of which it has been proved that they possess carcinogenic properties in or via the aquatic environment,¹
5. mercury and its compounds,
6. cadmium and its compounds,
7. persistent mineral oils and hydrocarbons of petroleum origin,

and for the purposes of implementing Articles 2, 8, 9 and 14 of this Directive:

8. persistent synthetic substances which may float, remain in suspension or sink and which may interfere with any use of the waters.

List II of families and groups of substances

List II contains:

- substances belonging to the families and groups of substances in List I for which the limit values referred to in Article 6 of the Directive have not been determined,
- certain individual substances and categories of substances belonging to the families and groups of substances listed below,

and which have a deleterious effect on the aquatic environment, which can, however, be confined to a given area and which depend on the characteristics and location of the water into which they are discharged.

¹ Where certain substances in List II are carcinogenic they are included in category 4 of this list.

Families and groups of substances referred to in the second indent

1. The following metalloids and metals and their compounds:

1. zinc	11. tin
2. copper	12. barium
3. nickel	13. beryllium
4. chromium	14. boron
5. lead	15. uranium
6. selenium	16. vanadium
7. arsenic	17. cobalt
8. antimony	18. thalium
9. molybdenum	19. tellurium
10. titanium	20. silver
2. Biocides and their derivatives not appearing in List I.
3. Substances which have a deleterious effect on the taste and/or smell of the products for human consumption derived from the aquatic environment,
and compounds liable to give rise to such substances in water.
4. Toxic or persistent organic compounds of silicon, and substances which may give rise to such compounds in water, excluding those which are biologically harmless or are rapidly converted in water into harmless substances.
5. Inorganic compounds of phosphorus and elemental phosphorus.
6. Non-persistent mineral oils and hydrocarbons of petroleum origin,
7. Cyanides, fluorides.
8. Substances which have an adverse effect on the oxygen balance, particularly: ammonia, nitrites.

Statement on Article 8

With regard to the discharge of waste water into the open sea by means of pipelines, Member States undertake to lay down requirements which shall be not less stringent than those imposed by this Directive.

* * *