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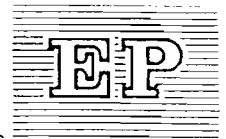
Meeting of experts on the South Asian Seas  
Regional Programme

Bangkok, 1-5 December 1986

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## INTRODUCTION

1. The Regional Seas Programme was initiated by UNEP in 1974. Since then the Governing Council of UNEP has repeatedly endorsed a regional approach to the control of marine pollution and the management of marine and coastal resources. The Regional Seas Programme at present includes ten regions.<sup>1/</sup> It is conceived as an action-oriented programme having concern not only for the consequences but also for the causes of environmental degradation and encompassing a comprehensive approach to controlling environmental problems through the management of marine and coastal areas.

2. Each regional action plan is formulated according to the needs of the region as perceived by the Governments concerned. It is designed to link assessment of the quality of the marine environment and the causes of its deterioration with activities for the management and development of the marine and coastal environment. The action plans promote the parallel development of regional legal agreements and of action-oriented programme activities.

3. In May 1982 the UNEP Governing Council adopted decision 10/20 requesting the Executive Director of UNEP "to enter into consultations with the concerned States of the South Asia Co-operative Environment Programme (SACEP) to ascertain their views regarding the conduct of a regional seas programme in the South Asian Seas."

4. In response to that request the Executive Director appointed a consultant to undertake a mission to the coastal States of SACEP. The report of the consultant was transmitted to the Governments of the South Asian Seas region in May 1983, and the recommendations of the Executive Director were submitted to the Governing Council at its eleventh session.

5. By decision 11/7 of 24 May 1983, the UNEP Governing Council requested "the Executive Director to designate the South Asian Seas as a region to be included in the regional seas programme, in close collaboration with the SACEP and Governments in the region, and to assist in the formulation of a plan of action for the environmental protection of the South Asian Seas".

6. As a first follow-up activity to decision 11/7 of the Governing Council, the Executive Director convened, in co-operation with SACEP, a meeting of national focal points of the States of the region in order to seek their views on how to proceed in developing a comprehensive action plan for the protection and management of the marine and coastal environment of the South Asian Seas region (Bangkok, Thailand, 19-21 March 1984).<sup>2/</sup>

7. The meeting discussed the steps leading to the adoption of an action plan and reached a consensus on the priority areas to be considered in the action plan. The meeting recommended that Governments, with the assistance of UNEP and other organizations as appropriate, should initiate the preparation of country reports reviewing their:

- (a) national environmental problems defined as priority areas of regional concern;
- (b) activities which may usefully be carried out under the action plan to resolve or mitigate these problems; and
- (c) national institutional and manpower resources which are, or may be, involved in dealing with these problems, including the identification of the need to strengthen their capabilities.

<sup>1/</sup> Mediterranean Region, Kuwait Action Plan Region, West and Central African Region, Wider Caribbean Region, East Asian Seas Region, South-East Pacific Region, South Pacific Region, Red Sea and Gulf of Aden Region, Eastern African Region, and South Asian Seas Region.

<sup>2/</sup> See Report of the Meeting of National Focal Points on the Development of an Action Plan for the Protection and Management of the South Asian Seas Region, UNEP/WG.105/5.

8. It was also recommended that UNEP prepare in co-operation with SACEP, and other organizations as appropriate:

- (a) a draft overview report, based on the country reports, reviewing the environmental problems of the region defined as priority areas;
- (b) a document addressing the essential legislative aspects relevant to the action plan; and
- (c) a draft action plan reflecting the conclusions of the country and regional reports.

9. The present document addresses the legislative aspects of the proposed regional programme. The report presents a survey of global agreements relevant to the protection of the marine and coastal environment <sup>3/</sup>, a summary of information presented in the five national reports prepared by Governments of the region and other available material on national legislation applicable to the protection of the South Asian Seas marine environment <sup>4/</sup>, and proposals for the negotiation of a regional convention and related protocols in conjunction with the development of the action plan for the protection and management of the marine and related coastal environment of the South Asian Seas region.

#### GLOBAL AGREEMENTS

##### Current treaty law

10. A number of conventions, applicable on a global level, have been adopted to control the various forms of marine pollution. Only some of the States of the South Asian Seas region are parties to these conventions, (see the table in the annex I, indicating membership), although two or three have made known their intention of acceding to them in the near future.

11. The conventions concerning pollution from shipping will first be examined, followed by those relating to pollution from land-based sources, from operations on the seabed and the continental shelf, from waste dumping, and from military activities.

##### Pollution from shipping

12. International law has been concerned with this source of marine pollution since 1954, when the International Convention for the Prevention of Pollution of the Sea by Oil was adopted in London (OILPOL). This convention, which was amended on several occasions, aims principally at preventing intentional pollution from normal shipping operations. It was replaced on 2 October 1983 by the 1973 International Convention for the Prevention of Pollution from Ships (MARPOL), for those Parties to this more recent convention. The frequency of accidental pollution has also led to the drawing up of a series of conventions intended to cope with pollution from accidents. Both these cases will be examined here, together with related agreements on liability and compensation for pollution damage.

<sup>3/</sup> This part is an updated, amended version of Part I of a report by the FAO Legal Office based on the work of A. Piquemal and M. Savini, prepared in 1979 under FAO/UNEP joint project number FP/0503-77-02.

<sup>4/</sup> Additional information was taken primarily from two ESCAP reports entitled: Status of Environmental Protection Legislation in the ESCAP Region (IHT/IMEPL/2/Rev.1, November 1978) and Legislative Aspects of the Protection of the Marine Environment in the ESCAP Region (ECU/PMERE/2, July 1980).

Prevention of pollution from normal shipping activities

13. The control of this type of pollution mainly comes under the 1954 OILPOL Convention cited above. The text was subsequently amended in 1962, 1969 and 1971. The 1962 amendments came into force in May 1967, and those of 1969 in January 1978. The 1971 amendments have not yet come into force.

14. With regard to the South Asian Seas region, it should be noted that Bangladesh, India, Maldives, and Sri Lanka have become parties to the 1954 Convention as amended in 1962 and 1969.

15. The 1954 International Convention for the Prevention of Pollution of the Sea by Oil delineates certain areas where the discharge by tankers of oil or oily mixture is prohibited. Under the terms of the Convention, the term "oily mixtures" means all mixtures in which the proportion of oil is equal or superior to 100 ppm (one hundred parts of oil to one million parts of mixture). The term "oil" embraces crude oil, fuel oil, heavy diesel oil and lubricating oils. The prohibited zones include all sea areas within fifty miles of the nearest land and also a number of special areas where this distance is extended to one hundred or even one hundred and fifty miles.

16. Exceptions to these prohibitions are anticipated for security reasons or to avoid damage to ships. Sanctions for the discharge of oil resulting from damage or unavoidable leakage cannot be applied if all reasonable precautions have first been taken. Lastly, the discharge of certain residues of lubricating oil or oily matter from bilges will be tolerated when carried out as far from land as practicable.

17. In principle, the Convention applies to all sea-going vessels registered by a contracting State. However, exceptions are made for small vessels (tankers of less than 150 tons and other ships under 500 tons) and also for naval ships and ships for the time being used as naval auxiliaries.

18. These prohibitions are completed by a certain number of concrete preventive measures. Ships to which the convention applies must be equipped with machinery to avoid, where reasonably possible, the escape of fuel oil or heavy diesel oil into the bilges, while governments must take suitable measures to create adequate facilities for the reception of oily wastes and mixtures in their principal ports. In addition, all tankers and all other ships using oil as fuel must keep an oil record book detailing each occasion on which oil or oily mixtures are loaded, unloaded or discharged, as well as operations such as cleaning up, ballasting, the discharge of water from ballast and fuel tanks, and accidental or emergency discharges. This record may be examined by any of the competent authorities of a contracting government when a ship to which the convention applies is in a port within its territory.

19. Sanctions for violations are determined by legislation in the flag State of the ship involved, it being clearly understood that penalties imposed by a State for prohibited discharges on the high seas shall not be less severe than those which would be exacted for the same violations in its own territorial waters. Contracting States must collaborate in tracking down violations. A government which learns of a discharge in a prohibited area must inform the competent authorities of the flag State of the ship responsible, and these authorities, if they consider that there is sufficient evidence, must start proceedings against the ship or the master of the vessel. Disputes regarding the interpretation or application of the Convention must be referred to the International Court of Justice on request of either of the parties, unless the litigants agree to submit to arbitration.

20. This system was radically changed by the 1969 amendments to the 1954 Convention. The concept of prohibited zones was abandoned in favour of protective measures to be applied to all sea areas. Specifications regarding permitted discharges were completely revised and are now based on the volume of oil discharged in relation to the average distance travelled. For tankers, oil discharges are prohibited except under the following conditions:

- the tanker must be en route;
- the discharge must not exceed sixty litres of oil per mile travelled;
- the tanker must be over fifty miles away from the nearest land; and
- the total weight of oil discharged on a ballast voyage (that is, when the ship is ballasted with water) must not exceed 1/15,000 of the total oil cargo carrying capacity.

21 The first three conditions also apply to all other ships. In addition, for ships other than tankers it is also stipulated that oily mixtures discharged may not contain more than one hundred parts of oil to one million parts of mixture.

22. The new specifications authorize the discharge of ballast water when it does not leave visible traces on a calm sea. Provisions regarding punishment for violations have not been fundamentally altered.

23. The 1971 amendments are of an essentially technical nature and directed to setting security standards in the construction of new tankers in order to minimize the risk of oil outflow should a tank be breached in an accident.

24. The International Convention for the Prevention of Pollution by Ships (MARPOL) adopted in London in November 1973 incorporates the provisions of the 1954 Convention in a strengthened form within the framework of a broader convention covering all forms of operational or accidental pollution from shipping. This Convention came into force as amended in 1978, on 2 October 1983, except its annexes II to V. None of the South Asian Seas States were party to the Convention as of May 1985.

25. The main body of the Convention contains only general provisions regarding its field of application, controls and the enforcement of detailed standards and regulations. The latter are set out in five annexes covering various substances, the discharge of which is to be controlled. Annexes I and II are considered "obligatory" as integral parts of the Convention. The other three are described as optional. However, the 1978 amendments have delayed the application of annexes II to V.

26. The provisions of MARPOL apply to all tankers of 150 GT or over and to all other ships of 400 GT or over, except warships. Fixed or floating oil rigs also come under these provisions.

27. In order to eliminate the risk of pollution overtly incurred through operational discharges, it is anticipated that new tankers whose weight when fully loaded reaches or exceeds 70,000 GRT should be equipped with segregated ballast tanks as distinct from cargo tanks. As on all existing tankers, they also have to be equipped with machinery to keep a constant check on and control oil discharges. This method of recording all discharges enables the exact time (and therefore the place) of a discharge to be known, as well as the quantity of matter discharged and the proportion of oil it contains. When the total quantity of the mixture and the percentage of oil in it exceed the authorized levels, the control mechanism automatically stops the discharge. In addition, except in certain specified cases, all ships covered by the Convention have to be fitted with suitable machinery to provide for the separation of mixtures, or a filtering system, slop tanks, decanting tanks and standard piping and pumping arrangements.

28. The conditions applying to discharges are more or less the same as those prescribed in the 1969 amendments to the 1954 Convention. It is to be noted that the system of special areas where all discharges are absolutely prohibited has been reintroduced, but none of them are located in the South Asian Seas region. In all cases oil residues left after decantation must be kept on board. Contracting States are required to set up facilities for the reception of this waste in their principal ports.

29. As under the 1954 Convention, all ships will have to keep an oil record book. Each vessel must also be provided with an International Oil Prevention Certificate, which will be issued by the administration of its flag State after a detailed inspection to check that the structure, equipment, installations, arrangements and materials of the ship in question are in conformity with the provisions of the Convention. This inspection must be repeated at least once every five years. The competent authorities assume total responsibility for the certificate, and are fully answerable for the thoroughness and efficiency of such inspections.

30. Annex II to the 1973 Convention regulates the transport of noxious liquid substances carried in bulk and applies to all tankers except warships and auxiliaries. Noxious liquids are divided into four categories designated by the letters A, B, C, and D, in diminishing order of the hazard they present to marine resources, to human health and to other legitimate uses of the sea. Tankers intended for the transport of these substances are subject to the same type of inspections as those laid down for the oil tankers. Each must receive an International Pollution Prevention Certificate stating that the ship satisfies the requirements specified in the "Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk" adopted by the Assembly of IMO.

31. Except in case of necessity or force majeure, the discharge of substances listed in any one of the four categories A - D is in principle prohibited. However, this prohibition is not absolute, and discharges are admissible provided that certain conditions are respected; the object of these conditions is to ensure that the overall quantity of the discharges remains low and, above all, that the harmful character of the substances is virtually eliminated by sufficient dilution. The ship must always be in motion: it must release the discharge below the waterline; it must be at least twelve miles from the nearest land and in water at least twentyfive metres deep. The permitted volume and concentration of the noxious substances vary according to the category of the product. These conditions are stricter in the zones designated as special areas. There is no Special Area strictly located in the waters of the South Asian Seas.

32. Each ship must have a cargo record book in which all operations must be reported regarding the loading, transfer and unloading of cargoes of noxious substances, as well as the operational or accidental discharge of such matter. The competent authorities of each contracting State may examine the record book of any ship in their ports. This procedure is intended to facilitate the application of the prohibitions mentioned above. Article II of the 1978 MARPOL Protocol stipulates that the Parties to the Protocol shall not be bound by the provisions of annex II of the Convention for a period of three years from the date of entry into force of the present Protocol.

33. Annex III to the Convention contains only rules of a general nature, and leaves their application to the discretion of individual governments. It lays down the principle that the most dangerous substances should only be transported in limited quantities, and makes recommendations as to the essential features of packagings and containers and their stowage.

34. Annex IV to the Convention stipulates that ships of over 200 GT authorized to carry more than ten persons must be equipped with machinery to treat, purify or disinfect sewage, or a storage tank for it, as well as a standardized piping system for its disposal in the appropriate port installations. After a thorough inspection, these ships may be issued with an International Sewage Pollution Prevention Certificate. The object of these provisions is to prohibit in principle all discharge of sewage, at least in coastal waters, except in cases of necessity or force majeure. Nevertheless, such discharges are permitted only when certain conditions are observed. If the sewage is only disinfected or liquidized, the ship may expel it in moderate quantities while travelling at a distance of over four miles from the nearest land. If it has been purified and treated according to official standards, it may be discharged freely.



35. A last annex to the Convention seeks to reduce the discharge of garbage from ships, such as paper, bottle, cans, etc. It prohibits the jettisoning at any point of objects made of plastic or synthetic fibres. The discarding of packagings and packing and wrapping materials may not take place less than five miles from the nearest land, nor in specially protected areas. Other refuse may only be thrown into the sea at a minimum distance of twelve miles from the coast, unless it is ground up or liquified, and always outside the limits of the special areas.

36. These regulations apply to all ships, whatever their tonnage, with the general exception of warships. As for oil rigs, materials which have been extracted from the seabed may be thrown back, but refuse may only be jettisoned after being ground up or liquidized.

37. As with the 1954 Convention, the principle of leaving enforcement powers with the flag State of the ship involved is retained. Nevertheless, contracting States have the right to impose sanctions for violations in waters under their jurisdiction, including those committed by ships flying the flags of any other contracting parties. When the violation has occurred outside these waters or in a place which cannot be determined, the powers attributed to the coastal State are more restricted. In ports or terminals generally within their jurisdiction, the competent authorities may proceed to an examination of the certificates which the ship flying the flag of the other State is required to possess. If it appears that the ship being inspected does not have a valid certificate on board or that the vessel does not come up to the specifications stated on the document, the coastal State may prohibit the ship from sailing. The competent authorities of the port State may also inspect the ship to discover whether a violation has occurred. They may also examine all relevant documents where discharges are recorded and, in particular, all mechanisms for the checking and control of oil discharges. They will also be permitted to ascertain whether the ship is carrying waste or other matter which it intends to discharge at sea, or whether such an operation has been performed prior to its arrival. If a State thus discovers that a violation has been committed, it must collect all existing evidence and information, possibly with the co-operation of other contracting States, and forward it to the competent authorities of the flag State, so that proceedings may be taken against the guilty party. The flag State is to investigate the matter and, if satisfied that sufficient evidence is available, must cause legal proceedings to be taken against the violator as soon as possible. At this point the Convention limits itself to stating that sanctions imposed must be sufficiently severe to discourage any other offenders, and must be equally severe irrespective of where the violations occurs.

#### Prevention of pollution from shipping accidents

38. All States of the region are aware of the enormous risks that intense traffic of tankers entails. The work of IMO aims at preventing the multiplication of tanker accidents and pollution emergencies.

39. The International Regulations for Preventing Collisions at Sea (1960-1972) lay down basic rules for avoiding situations liable to cause shipping accidents and include a provision relating to the establishment of voluntary traffic separation schemes. The rules laid down in 1960 came into force in 1965. They were amended in 1972 by a Convention which came into force in July 1977 providing for obligatory traffic separation schemes. The 1960 rules were replaced, as of 15 July 1977, by the Regulation attached to the 1972 Convention, for those States which are Parties to the Convention.

40. The 1960 International Convention for the Safety of Life at Sea (SOLAS), which entered into force in May 1965 and has been amended in 1966, 1967, 1968, 1969, 1971 and 1973, establishes certain basic construction, equipment, safety and operation standards, including standards for nuclear reaction installations. None of the amendments are in force. Safety certificates and assessments by the competent national authorities are to be made available to the competent authorities of countries which the ship intends to visit. Bangladesh, India, Maldives, Pakistan, and Sri Lanka are all contracting Parties to the Convention.

41. The 1974 International Convention for the Safety of Life at Sea, which entered into force in May 1980, supersedes the 1960 SOLAS Convention for those States which have become parties to the Convention of 1974. It contains more rigid technical specifications regarding the structure and equipment of ships, including nuclear-propelled ships. Of the States in the South Asian Seas region, Bangladesh, India, Maldives and Sri Lanka are parties to the Convention. A supplementary protocol to the Convention, adopted by an IMO Conference in February 1978, requires special navigation equipment for tankers over 10,000 tons and tightens inspection and certification provisions. It entered into force on 1 May 1981. The amendments of 1981 entered into force on 1 September 1984.

#### Minimization of damage from shipping accident

42. Under the 1969 International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, coastal States faced with a grave and imminent danger to their coastline or related interests from pollution or threats of pollution of the sea by oil following upon a maritime casualty, may take such action on the high seas as may be reasonably necessary to avert or mitigate the danger. The Convention does not apply to warships or to installations on the continental shelf. Certain procedures of notification and consultation are envisaged by the Convention, although these may be waived in cases of extreme urgency. The severity of intervention measures must be in proportion to the damage which the coastal State has sustained, or with which it is threatened. In the event of excessive measures, the coastal State may be required to pay compensation. Provision is made for the compulsory submission of any disputes between Parties to conciliation and arbitration. The Convention came into force in May 1975. Of the States covered in this report, Bangladesh and Sri Lanka are parties to the Convention.

43. The 1973 Protocol Relating to Intervention on the High Seas in Cases of Marine Pollution by Substances Other than Oil came into force on 30 March 1983. None of the States of the region have become a party to it. It extends the application of the provisions of the 1969 Convention to intervention on the high seas in cases of pollution by substances other than oil which are liable to cause serious damage. These substances are listed in an Appendix to the Protocol, and comprise products which endanger human health, are harmful to marine flora and fauna, are detrimental to natural beauty and inhibit other legitimate uses of the sea.

#### Liability and compensation for pollution from shipping

44. The 1969 International Convention on Civil Liability for Oil Pollution Damage, which came into force in 1975, defines the shipowner as the person responsible for possible damage due to oil pollution. The shipowner is the person in whose name the ship has been registered. Liability is strict, in the sense that the shipowner is responsible for all pollution resulting from a leakage or a discharge of oil from his ship without it being necessary to prove fault. The Convention applies only to tankers and does not cover other commercial vessels or warships. It applies exclusively to damage by pollution occurring in the territory, including the territorial seas, of a contracting State and to protective measures intended to avert or reduce such damage. In order to guarantee the solvency of the shipowner, the latter must take out insurance or some other financial guarantee, the amount of which is fixed by the Agreement and varies according to the tonnage of the ship. Its strict and precise provisions tend to ensure that the obligations of the shipowner will be respected and easily enforced. Maldives, Sri Lanka are parties to the Convention. Financial points were revised by a protocol drawn up in London in November 1976, which came into force on 8 April 1981. Maldives has accepted the Protocol.

45. The 1971 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage aims at guaranteeing compensation for victims of oil pollution damage in a more satisfactory way than that provided by the 1969 Convention. In particular, it provides compensation for the victims when the shipowner and his guarantor are incapable of meeting their financial obligations. It establishes an international fund formed essentially by contributions paid by importers of oil in proportion to the quantities received. It came into force in October 1978 and among the countries forming the subject of the present report Maldives and Sri Lanka have acceded to it. A supplementary protocol adopted in London in 1976 and not yet in force deals with financial aspects.

46. The International Convention on the Liability of Operators of Nuclear Ships, adopted in Brussels in 1962, attempted to place strict liability on the operators of nuclear ships, including warships and other governmental vessels. The Convention has not yet entered into force. The Convention Relating to Civil Liability in the Field of Maritime Carriage of Nuclear Material, adopted in Brussels in 1971, is designed to remove certain conflicts between the liability of shipowners and general conventions on damage caused by nuclear installations. It entered into force in 1975, but has not been ratified by any State in the region.

47. The International Convention Relating to the Limitation of the Liability of Owners of Sea-going Ships, adopted in Brussels in 1957, limits the liability of shipowners for damage caused by their vessels, in the absence of privity or fault, to a maximum of 7 million U.S. dollars. It does not refer specifically to damage caused by pollution although it is applicable in such cases. The Convention came into force in 1968. A Protocol of December 1979, which has not yet entered into force, has changed the amounts for compensation. It is expected to be replaced eventually by the Convention on Limitation of Liability for Maritime Claims, adopted in London in 1976, which raised the limits of liability and extended them from shipowners to salvors. According to Article 3, however, the limitation shall not apply to claims for nuclear damage and to claims for oil pollution damage within the meaning of the above-mentioned 1969 Liability Convention or any amendment or protocol thereto which is in force. No State of the South Asian Seas region has ratified this agreement.

#### Pollution from land-based sources

48. To date no convention has been concluded at a global level restricting discharges of polluting substances from land-based sources into the sea. However, global guidelines for the protection of the marine environment against pollution from land-based sources were developed by a UNEP Working Group of Experts and adopted by the UNEP Governing Council. The Governing Council recommended that States take the guidelines into account when developing national legislation and bilateral, regional or international agreements concerned with regulating land-based sources of pollution.

49. It is appropriate to mention under this section the 1971 Convention on Wetlands of International Importance especially on Waterfowl Habitat, which entered into force in December 1975. It was amended by a Protocol adopted on 3 December 1982, in Paris. India and Pakistan are parties to the Convention. India is also a party to the Protocol. This Convention is interesting in view of the vast areas of wetlands and mangroves which are in need of protection in the countries covered by the present report.

50. Similarly, the Convention concerning the Protection of the World Cultural and Natural Heritage, adopted in Paris at UNESCO in 1972 and in force since 1975, deserves a mention in this section on land-based sources of pollution. In being instrumental in the protection of fragile or ecologically significant parts of the territory, it may have a direct effect on land-based pollution abatement. In view of the portion of coastal and marine environment both Conventions are intended to protect, their protection cannot go without a strict control of the land-based sources of pollution. As of May 1985 Bangladesh, India, Pakistan and Sri Lanka had ratified the Convention.

#### Pollution from operations carried out on the seabed and continental shelf

51. The 1958 Convention on the High Seas which entered into force in 1964, stipulates that all States are required to establish regulations directed towards avoiding pollution of the sea by oil discharged from ships or pipelines, or resulting from the exploration and exploitation of the seabed and its subsoil. No State in the region has become parties to it.

52. The 1958 Convention on the Continental Shelf which entered into force in June 1964, applies to areas of the continental shelf extending beyond the limits of territorial waters. It defines the continental shelf as being the area of seabed confined within the 200 meters isobath or

extending beyond this limit to the point where the depth of the superjacent waters permits the exploitation of the natural resources of the said area. It prohibits, inter alia, any unjustifiable interference with navigation, fishing or the conservation of the living resources of the sea resulting from the exploration of the continental shelf and the exploitation of its natural resources. Under the Convention, coastal States are also required to take all appropriate measures for the protection of the living resources of the sea from harmful agents in the safety areas to be established around continental shelf installations. Other preventive measures are also stipulated, such as requirements for giving notice of the construction of installations, the setting up and maintenance of adequate warning systems for shipping, the dismantling of abandoned or disused installations and the siting of installations sufficiently far away from recognized shipping lanes. No State of the region is a party to the Convention.

53. The 1958 Convention on the High Seas requires contracting States to take measures to prevent pollution of the seas resulting from the dumping of radio-active wastes, taking into account any standards and regulations which may have been formulated by the competent international organizations. In general terms, contracting States are also required to co-operate with the competent international organizations in taking measures for the prevention of pollution of the seas or air space above resulting from any activities entailing the use of radio-active materials or other harmful agents. All Geneva Conventions of 1958 will be superseded by the recently adopted U.N. Convention of the Law of the Sea, for those States which will become Parties to it (Article 311 of the 1982 Convention).

#### Pollution from waste dumping

54. The 1972 Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matter recognizes that States have the sovereign right to exploit their own resources according to their environment policies, but stipulates that they also have the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction. Contracting parties pledge themselves to take all practicable steps to prevent the pollution of the sea by the dumping of wastes and other matter liable to create hazards to human health, to harm living resources and marine life, to damage amenities or to interfere with other legitimate uses of the sea. The Convention defines dumping as "any deliberate disposal at sea of wastes or other matter from vessels, aircraft, platforms or other man-made structures at sea", as well as the deliberate disposal of vessels, aircraft, platforms or other man-made structures at sea. It does not apply to discharges resulting from the normal operations of ships, aircraft, platforms and other structures.

55. Wastes and other matter the dumping of which comes under the Convention, are grouped in three categories according to the gravity of the risks they present. The dumping of wastes in the first category is in principle totally prohibited. This category comprises organo-halogen compounds, mercury and cadmium and their compounds, persistent plastics and other synthetic materials liable to interfere with fishing, navigation or other legitimate uses of the sea, high-level radio-active substances, materials produced for chemical or biological warfare and most kinds of oil.

56. With regard to the dumping of certain other substances, the Convention requires that the State wishing to dispose of them take special precautions. Such dumping is permitted only after the issue of a specific permit. This second category of waste includes substances containing significant amounts of arsenic, lead, copper, zinc, organosilicon compounds, cyanides, fluorides, pesticides, and radio-active matter the dumping of which is not totally prohibited. However, the Eighth Consultative Meeting of Contracting Parties has adopted a resolution calling for a suspension of the dumping of radioactive wastes at sea pending further discussions on the possible amendment of the Convention to prohibit the dumping of radioactive wastes.

57. A general dumping permit stating the manner of disposal and any necessary protective measures is required for the dumping of all other wastes and substances.

58. The above prohibitions do not apply to warships and military aircraft. They are also inapplicable when it is necessary to secure the safety of human life or of ships, aircraft, platforms and other man-made structures at sea.

59. The Convention envisages that where it is in the common interest of contracting parties to protect the marine environment of a given geographical area, the countries concerned, taking regional characteristics into account, shall endeavour to enter into regional agreements with a view to preventing pollution from dumping.

60. As of May 1985, no State dealt with in this report has become party to this Convention, which entered into force in 1975.

#### Pollution due to military activities

61. The 1963 Treaty Banning Nuclear Weapons Tests in the Atmosphere, in Outer Space and Under Water, according to its preamble, aims at putting an end to contamination of the human environment by radioactive substances. It prohibits all test explosions of nuclear weapons in the atmosphere beyond its limits, including outer space, or underwater, including territorial waters and the high seas, as well as in any other environment, if such an explosion causes radioactive debris to be present within the territorial limits of the State under whose jurisdiction or control such explosion is conducted. The Treaty entered into force in October 1963. Parties to this Treaty include India and Sri Lanka.

62. The 1971 Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Seabed and the Ocean Floor and in the Subsoil Thereof prohibits the emplacement of nuclear and other weapons of mass destruction on the seabed or in its subsoil. It also prohibits the construction of installations for launching the weapons and other installations expressly designed for their storage, testing or utilization. It applies only to zones which are situated beyond twelve nautical miles from the coast. The Treaty entered into force in May 1972. As of May 1984 only India was among the parties to this Treaty.

63. The 1976 Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques, which came in force in October 1978, was prepared by the Conference of the United Nations Committee on Disarmament, pursuant to UN General Assembly Resolution 31/72. While supporting international co-operation in the peaceful uses of "environmental modification techniques" as defined in Article II (e.g. including artificial changes of the Earth's hydrosphere), the convention prohibits hostile uses causing serious harm to other States. Bangladesh, India and Sri Lanka are among the parties to the Convention.

#### Protection of marine species

64. The 1946 International Convention for the Regulation of Whaling came into force in 1947. It was amended by a Protocol of 1956 which entered into force in 1959. India is a party to the Convention and a Member of the International Whaling Commission. On the initiative of the Seychelles, the International Whaling Commission has established a whale sanctuary in the Indian Ocean.

65. The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), adopted in Washington in 1973 and in force since 1975, regulates international trade in specimens of threatened and, endangered species. Several marine species are covered by the three annexes to the Convention. Bangladesh, India, Pakistan and Sri Lanka are parties to the Convention.

66. The Convention on the Conservation of Migratory Species of Wild Animals (Bonn, 1979) also contains marine species in its Appendix I (endangered migratory species) and II (migratory species to be the subject of agreements). As of May 1985, India was the only State of the region that was a party to the Convention.

67. The International Plant Protection Convention (Rome, 1951) which entered into force in 1952, could potentially cover cultivated marine plants. Bangladesh, India, Pakistan and Sri Lanka have ratified the Convention

#### United Nations Convention on the Law of the Sea

66. Between 1970 and 1982, the United Nations Organization has worked on a process of general revision of the whole Law of the Sea. Acting on Resolution 2760 (XXV) the General Assembly convened the Third United Nations Conference on the Law of the Sea, with a mandate to adopt a Convention dealing with all matters relating to the Law of the Sea, including the protection of the marine environment. All the States concerned by the present report have taken part in the Conference.

69. Delegations from 144 countries met in Jamaica, from 6 to 10 December 1982 for the final session of the Conference and the opening for signature of the United Nations Convention on the Law of the Sea. On 10 December 1982, 119 delegations signed the new Convention. All States of the region are included among the signatories to the Convention.

70. In this seventeen part Convention, the provisions dealing with the protection and preservation of the marine environment are contained in Part XII. In addition, a number of provisions which are contained in other parts are directly related to the conservation of marine living resources (articles 61, 63-67, 117-120). The text posits the general obligation of States to protect and preserve the marine environment, and recognizes, on the other hand, the sovereign right of States to exploit their natural resources pursuant to their environmental policies. States are to take all necessary measures to prevent, reduce and control pollution of the marine environment from any source and to ensure that activities under their jurisdiction do not cause pollution damage to other States or to areas beyond their national jurisdiction. The text contains framework provisions, and provides that States should co-operate on a global and, as appropriate, on a regional basis to formulate further rules, standards and recommended practices and procedures consistent with the convention. In taking measures under the convention, States are to guard against merely transferring pollution damage or hazards from one area or medium to another.

71. States are to notify other States likely to be affected by any imminent danger to the marine environment and are to co-operate with other States in the area to combat pollution emergencies and to draw up contingency plans for this purpose. They are to co-operate in the promotion of studies, research and exchange of information and in establishing a network of centres of information. There is also made for co-operation in monitoring and environmental assessment. Developing States are to be accorded preferential treatment by international organizations and are to receive scientific and technical assistance.

72. States are required to establish national controls over land-based sources of marine pollution, over pollution arising from the exploration and exploitation of the seabed, and from installations under their jurisdiction, over the dumping of wastes and other matter and over pollution from or through the atmosphere. In each case, the possibility of further action at the regional level through harmonization of national policies or the establishment of regional rules, standards and recommended practices and procedures is envisaged. Measures for the prevention of pollution from activities relating to the international seabed are provided for under a general provision in Part XI.

73. So far as pollution from shipping is concerned, States are to establish international rules and standards and, at the national level, laws and regulations covering vessels flying their own flag that have at least the same effect as those international rules and standards. Each State may establish its own laws and regulations for vessels in its territorial sea, but these are not to hamper innocent passage of foreign ships. In their exclusive economic zones States may adopt legislation for the enforcement of generally accepted international pollution rules and standards. Where such rules and standards are inadequate to meet the special circumstances of a particularly vulnerable area in its economic zone, a coastal State may apply to the competent international organization to have the area declared a special area.

74. The Convention contains a number of provisions on enforcement with particular reference to coastal States' rights. Enforcement of controls over land-based sources of marine pollution, over pollution from activities on the seabed under their jurisdiction and from atmospheric sources, is reserved to States, and over pollution from activities on the international seabed to the International Seabed Authority, in co-operation with the States Parties. Dumping controls are to be enforced by a State in its territory, the flag State, the coastal State for dumping in its exclusive economic zone or on its continental shelf, and the port State where dumping vessels are loaded. So far as discharges from shipping are concerned, responsibility for ensuring compliance with international rules and standards is vested with the flag State and with the port State for vessels voluntarily in its ports where the evidence indicates it has discharged contrary to international rules and standards, on the high seas or within its territorial sea or exclusive economic zone. The port State may also investigate and take action on alleged violations at the request of another State where vessels have discharged illegally within the territorial sea or exclusive economic zone of the requesting State.

75. Coastal State enforcement powers, where the offending vessel is not voluntarily within one of its ports, depend on where the violation took place. If the alleged offence took place within its territorial sea, the coastal State may undertake physical inspection and, if warranted, arrest and prosecute the master or owner of offending ship. If the offence took place in the exclusive economic zone against international rules and standards or national legislation implementing them, the coastal State may require the offending vessel to provide certain information regarding itself and the violation. Where the violation has resulted in substantial discharge and significant pollution, and if the information has been refused or is at variance with the evident facts, the coastal State may undertake physical inspection of the vessel. Where, on the other hand, a flagrant or gross violation has occurred in the exclusive economic zone resulting in major damage or the threat thereof, the coastal State may prosecute directly, provided that any bonding or other financial security arrangements in force are respected. Where investigations of foreign vessels are undertaken, the vessels must not be delayed longer than essential, and bonding arrangements are to be allowed. In any proceedings for violations outside internal waters only monetary penalties are to be imposed.

76. The provisions of the Convention are to be without prejudice to specific obligations assumed under the special conventions and agreements concluded in furtherance of the general principles of the framework convention.

#### Other global developments

77. A study on the legal aspects concerning pollution from offshore mining and drilling carried out within the limits of national jurisdiction was prepared by the UNEP Working Group of Experts on Environmental Law. The working group adopted a set of 42 conclusions, including guidelines to assist States when formulating national legislation or undertaking negotiations concerning prevention of pollution caused by offshore mining and drilling.

#### REGIONAL CO-OPERATION

78. All five states of the region are members of the United Nations, and various regional technical activities have been promoted in the South Asian Seas region by the UN and its specialized agencies, such as the United Nations Development Programme, the Food and Agriculture Organization of the United Nations, the United Nations Educational, Scientific and Cultural Organization, the World Health Organization, and the International Maritime Organization. International, intergovernmental and non-governmental organizations, such as the World Tourism Organization and the International Union for the Conservation of Nature and Natural Resources, have also initiated project activities in the South Asian Seas.<sup>5/</sup>

<sup>5/</sup> see "Note by the Director of SACEP on Regional and National Activities relevant to the development of an Action Plan for the Protection and Management of the South Asian Seas Region", UNEP/WG.105.4, and "Report of the Meeting of National Focal Points on the Development of an Action Plan for the Protection and Management of the South Asian Seas Region", UNEP/WG.105/5.

79. Focusing on the legislative aspects of such regional activities, it is useful to recognize the co-operation undertaken within the framework of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) which has promoted environmental activities in the region through its Environmental Coordination Unit. In 1978, ESCAP and UNEP organized an Intergovernmental Meeting on Environmental Protection Legislation. The meeting reviewed a report on the status of environmental protection legislation in the ESCAP region and made a number of recommendations aimed at strengthening national environmental legislation. In 1980, ESCAP convened the Regional Meeting on the Protection of the Marine Environmental and Related Ecosystems in Asia and the Pacific. That meeting also reviewed the status of national legislation in the region concerned with the marine environment.

80. The International Maritime Organization (IMO) sponsored, in February 1982, a meeting of government legal and technical experts with a view to strengthening means of co-operation in combating marine pollution by oil and other harmful substances in case of an emergency. The meeting prepared a draft agreement concerning regional co-operation in combating marine pollution which has been circulated to the governments of the region.

81. The South Asia Co-operative Environment Programme (SACEP) was initiated by a high level ministerial meeting in February 1981. Representatives from Bangladesh, India, Maldives, Pakistan and Sri Lanka were among the participants. SACEP was formally established in January 1982 when its articles of association entered into force. All five states of the region have ratified the articles of association.

82. The 1981 ministerial meeting identified 14 areas to be included within SACEP's mandate. Environmental legislation and a regional seas programme are two of the 14 areas. A study of environmental legislation has been undertaken to assist States to up-date regularly their national laws and regulations necessary for sound environmental management and to train national legal experts in preparing such legislation. SACEP is actively co-operating with UNEP in the development of a South Asian Seas regional seas programme.

83. At a meeting of foreign ministers in New Delhi in August 1983, the South Asian Regional Co-operation (SARC) was formally established with the signing of a joint declaration and the adoption of an integrated programme of action. The action programme identified eight fields of co-operation, including science and technology. Environmental issues are likely to be addressed under that field.

#### NATIONAL LEGISLATION

84. The following section of the report briefly reviews the status of national legislation relevant to the marine and coastal environment in the region. This summary has been prepared on the basis of information presented in the five national reports prepared by the Governments of the region and other available information.<sup>6/</sup>

85. A listing of the titles of environmental legislation mentioned in the reports is presented in annex II.

6/ Additional information was taken primarily from two ESCAP reports entitled: Status of Environmental Protection Legislation in the ESCAP Region (IHT/IMEPL/2/Rev.1, November 1978) and Legislative Aspects of the Protection of the Marine Environment in the ESCAP Region (ECU/PMERE/2, July 1980).



86. Bangladesh still has national environmental legislation in force which was enacted before independence as well as recent, more comprehensive laws. In addition to specific laws relating to forests, water and mineral resources (see annex II), the Environmental Pollution Control Ordinance (1977) is a framework law addressing the control of pollution from many diverse sources. The ordinance also provided for the establishment of the Environmental Pollution Control Board which sets environmental policy for the Government. The Department of Environmental Pollution Control is responsible for the implementation of the Board's policy.

87. Under the Territorial Waters and Maritime Zones Act the Government is called upon to prevent and control marine pollution and to preserve the quality and ecological balance of the marine environment in the high seas adjacent to the territorial waters of Bangladesh. The Act empowers the Government to make rules "for measures designed to prevent and control marine pollution of the high seas."

88. Of direct relevance to the priorities of the regional programme are the proposed marine pollution control ordinance and the pesticides rules, which were prepared in 1984 and are under consideration with a view to their adoption. The marine pollution control ordinance will address pollution from ships and offshore installations. The pesticide rules will regulate the import and use of pesticides in the country.

89. India has diverse and extensive legislation concerning the proposed priority areas (see annex II). While there does not appear to be one piece of umbrella legislation addressing environmental protection, the Constitution provides that the "State shall endeavour to protect and improve the environment and to safeguard the forests and wildlife of the country". Furthermore, the Constitution "makes it a duty of every citizen to protect and improve the natural environment, including forests, lakes, rivers and wildlife". Legislation is in force for the prevention and control of water and air pollution, the regulation of the use of insecticides and industrial development, the management of ports and shipping, the prevention of pollution of the sea by oil, and the protection of wildlife and ecosystems.

90. The Territorial Waters, Continental Shelf, EEZ and other Maritime Zones Act empowers the Government to protect the marine environment. The Coastguard Act envisages measures to "preserve and protect the marine environment and to prevent and control marine pollution". India has also draw up contingency plans for combating pollution due to oil spillages in its more important ports.

91. Maldives has at present no integrated environmental legislation. Environmental control has been promulgated through legislation addressed at the utilization of natural resources and development practices. Specifically legislation concerned with restricting coral and sand mining, exploitation of reef fish and development of the tourist industry all seek, to one degree or another, to promote sound environmental practices.

92. In 1984, the President of the Maldives established a National Environmental Commission to co-ordinate governmental environmental action. Representatives from twelve ministries and departments participate in the commission. The commission is empowered to review national environmental problems and to recommend action by the ministry or government agency most directly concerned. The commission itself has no enforcement powers.

93. The Constitution of Pakistan recognizes the Government's responsibility for protecting the environment and entrusts management of "environmental pollution and ecology" concurrently to the federal and state governments. In 1983, the Pakistan environmental Protection Ordinance was promulgated providing an umbrella act under which national environmental policy can be enforced. The ordinance addresses, among other things, solid waste management, water pollution and marine pollution from ships and harbours.

94. The National Environmental Protection Agency is responsible for establishing water quality and industrial discharge standards. The agency is also responsible for enforcing the requirement that an environmental impact statement be prepared and reviewed before permission is granted to proceed with major development projects. Use of pesticides is controlled in accordance with the Agricultural Pesticide Ordinance, 1971.

95. Wildlife legislation in Pakistan specifies species to be protected and provides for protective measures such as a ban on hunting of endangered species. A national council for conservation of wildlife has been constituted to direct policy in this area.

96. Sri Lanka has adopted much legislation aimed at protection of the marine and coastal environment (see annex II). The National Environmental Act, 1980, the National Aquatic Resources Research and Development Act, 1981, the Coast Conservation Act, 1983, the Fauna and Flora Protection Ordinance, and the Marine Pollution Preservation Act are some of the examples most relevant to the proposed regional programme.

97. The National Environmental Act provides umbrella legislation for environmental action. The Act established the Central Environmental Authority which recommends national environmental policy and criteria and co-ordinates research and governmental actions in the field. Other agencies are more narrowly focused in their mandate, such as the National Aquatic Resources Agency which was established in the aftermath of the Law of the Sea Convention and which oversees the management of Sri Lanka's offshore area. The agency provides for an integrated and comprehensive approach to the management of the aquatic environment.

98. All States of the region, no matter how scant or extensive their environmental legislation and machinery, note difficulties in effectively implementing such legislation. The reports recognize the need for a concerted effort to improve enforcement of existing legislation as well as the need to strengthen such legislation. The difficulties are traced to several factors, including:

- (a) general problems of economic development in all sectors;
- (b) shortage of funds for environmental protection;
- (c) lack of manpower, including technical expertise; and
- (d) lack of laboratories and monitoring-testing equipment to verify whether environmental standards and regulations are maintained and to assess whether they are effective in controlling the national environmental problems.

99. It is to be expected that the action plan will facilitate responses to all these difficulties, and in particular, may assist in the training of technical expertise and the provision of equipment necessary to supervise the effectiveness of environmental regulations. The action plan should also facilitate the strengthening, integration and harmonization of national environmental legislation.

#### NEGOTIATION OF A REGIONAL AGREEMENT

100. Within the context of the UNEP Regional Seas Programme, regional conventions for the protection and management of the marine and coastal environment have been adopted for seven

regions and an additional agreement is being negotiated at present.<sup>7/</sup> It is strongly recommended that the Governments of the South Asian Seas region also develop a legal agreement within which their co-operative activities may be carried out, and this recommendation has been reflected in the proposed draft action plan.<sup>8/</sup>

101. A formal legal agreement is useful in providing a framework for harmonizing and strengthening national legislation and promulgating, as necessary, new legislation relating to environmental concerns. A regional agreement gives more emphasis and continuity to governmental commitments by providing a forum for regular, high-level consultation among the parties to a formal agreement. During such consultations the implementation of the regional programme may be regularly reviewed. A convention also provides a legal basis on which to build financial support for continuous co-ordinated action. Domestically, through its participation in a regional agreement, each Government will be better placed to solicit political and financial support for national activities to be carried out as part of the action plan.

102. Experience has demonstrated that it is best to adopt concurrently the action plan and the regional convention so as to reinforce the fundamental link between the two and to promote a continuing political commitment at the highest and broadest level in each Government concerned.

103. All of the regional seas conventions have followed a similar format. The convention itself is an umbrella agreement outlining the general obligations and commitments of the parties. The convention's obligations are then progressively elaborated upon through the adoption of a series of technical protocols which provide for more detailed control measures, practices, standards and co-operative activities for a specific source of pollution or a particular environmental management issue. In the Mediterranean region, four protocols have been adopted to date addressing pollution from dumping, co-operation in pollution emergencies, pollution from land-based sources, and protected areas. In the South-East Pacific, three protocols have been adopted; two concerned with co-operation in pollution emergencies and one concerned with land-based sources of pollution and in the Eastern African Region, two protocols, protected areas and wild fauna and flora, and co-operation in pollution emergencies, were developed together with the convention. In all other regions, at least one protocol was adopted together with the framework convention. All regional programmes foresee the preparation and adoption of additional protocols as data concerning environmental problems is generated and as experience is gained in environmental management through the activities of the action plan. A progressive elaboration of more detailed obligations permits Governments to respond more realistically to the most pressing environmental concerns according to a timetable which fully takes into account their economic and technical capabilities.

<sup>7/</sup> The seven conventions are:

- Convention for Co-operation in the Protection and Development of the Marine and Coastal Environment of the West and Central African Region, 1981;
- Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region, 1984;
- Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region, 1985;
- Convention for the Protection of the Marine Environment and Coastal Areas of the South-East Pacific, 1981;
- Convention for the Protection of the Mediterranean Sea against Pollution, 1986;
- Kuwait Regional Convention for Co-operation on the Protection of the Marine Environment from Pollution, 1978; and
- Regional Convention for the Conservation of the Red Sea and Gulf of Aden Environment, 1982.

<sup>8/</sup> See UNEP/WG.153/4, paragraph 14.

104. Precedents for other formats for a regional environmental convention are not lacking. In the Baltic Sea Area, a single regional convention with annexes covering all types and sources of pollution was concluded (the Helsinki Convention). For the North-East Atlantic, separate, independent legal agreements have been negotiated for specific issues. The Oslo Convention and the Paris Conventions cover the same geographic region and are served by a single secretariat, but they are concerned with the dumping of wastes and land-based sources, respectively.

105. The precise format to be adopted, should Governments agree to negotiate a regional convention, is a question that the meeting of experts should address. Drawing upon the experience gained during the negotiations of the earlier regional seas conventions and the apparent appropriateness for South Asian Seas of the flexibility provided by the framework convention/protocol format, the secretariat has prepared a preliminary draft convention for the protection and management of the marine and coastal environment of the South Asian Seas (see annex III). A commentary appears throughout the proposed text to assist the reader in determining the origin of, and rationale behind, each article. The purpose of presenting such a draft is to demonstrate clearly the type of agreement which could be adopted in conjunction with the action plan.

106. A general view of governments in other regions has been that the framework convention was not specific enough to provide meaningful protection on its own and that as a first step towards strengthening each party's commitment, no State should become a party to a convention without also becoming a party to at least one protocol. The secretariat shares this view and has, consequently, prepared a draft protocol together with the draft convention (annex IV).

107. Recognizing the importance assigned to marine and coastal ecosystems and the conservation of threatened ecosystems and endangered and threatened species, the secretariat has prepared a preliminary draft protocol concerning protected areas and wild fauna and flora in the South Asian Seas. In preparing the preliminary draft protocol precedents found in existing global and regional conservation agreements, including the Protocol concerning Protected Areas and Wild Fauna and Flora in the Eastern African Region, have been taken into consideration.

108. The meeting will note that four technical annexes concerning protected species of wild fauna and flora and migratory species need to be developed as an integral part of the protocol. In order to assist Governments to identify the species and habitats within the region for which protection measures should be enacted, it is recommended that a regional inventory of ecosystems and a regional inventory of threatened or endangered coastal and marine species be published as technical background documentation on the basis of which the technical annexes may be drafted. Such documentation should be prepared before any meeting is convened to begin negotiations on the draft protocol.

109. The meeting of experts is invited to review the preliminary draft convention and protocol set forth in annexes III and IV with a view to advising the Executive Director of UNEP whether to initiate steps for the negotiation and adoption of a regional convention, and if so, what precise steps should be undertaken.

#### CONCLUSIONS

110. This study of the legal aspects of an action plan for the protection and management of the marine and related coastal environment of the South Asian Seas leads to several conclusions.

111. Participation of the States of the region in global conventions related to environment and natural resources management is weak. This is often a complex matter because ratification of conventions does not ensure compliance with the standards required therein. Before acceding to, or adopting, a convention, the State concerned should make a detailed assessment of the economic, technical and legal implications of its acceptance. For many States, this process can be hampered by limited technical manpower and resources. The States of the region may wish to consider the

usefulness of a regional framework for consultation on selected conventions relating to marine and coastal environment with a view to facilitating a knowledgeable review on the part of each State and promoting participation in such conventions, since they offer a number of legal safeguards and remedies against environmental degradation from sources outside the control of any one State's national jurisdiction.

112. A diverse selection of national legislation relevant to the protection of the marine environment appears to exist in the States. However, the laws were adopted primarily without conscious determination to protect the environment or control marine pollution. Consequently, many laws provide only incomplete and fragmentary environmental controls. Legislation relating to the marine and coastal environment should be properly integrated with policies for the management of natural resources and national economic development. What is needed are linkages which may give to sectoral laws a proper development/environment perspective. A general observation from the area is that the existing pollution level is still relatively low. Therefore, laws enacted at the present time should facilitate rational management of the marine environment and its resources for development purposes.

113. Enforcement of existing legislation seems a major problem for the States of the region. In fact, enforcement of environmental standards, given the technical character of such legislation is a problem for many States regardless of their stage of economic development. Basic requirements for such enforcement are trained manpower, specialized laboratories and equipment, and high level political commitment. In most of the States under review there appears to be a serious shortage of manpower, laboratories and equipment. Without these, no political commitment can be effective. Technical assistance to the competent Government authorities may facilitate regional harmonization in the methods and procedures of enforcement and compliance control at the national level.

114. A legislative action programme for each State may be envisaged, which should include a detailed review of environmental laws and machinery with a view to adapting it to the special needs of the marine and coastal environment. The goal of such an activity would be to ensure that each State will eventually be equipped with national laws and standard-setting machinery commensurate with its environmental priorities. While some external technical assistance may be necessary for this purpose, a considerable amount of relevant legal and administrative experience is already available in the States of the region. A useful first step, therefore, would be a systematic exchange of information and comparison of national laws and administrative institutions in the region. This may lead to gradual harmonization and reciprocal adjustment of standards and practices. Whether the development of uniform rules or guidelines should subsequently be envisaged for the region is essentially a question of practical needs and feasibility, and hence must be decided for each particular environmental problem. In some cases, sub-regional or bilateral co-ordination between neighbouring States would seem more appropriate, as in the case of legislation governing adjoining marine parks and specially protected coastal areas or where marine currents affect two or more adjacent coastal States. In other cases, a common methodology or policy may be more useful, such as where necessary to ensure uniform investment conditions.

105. In addition to global and national measures, regional action for marine environmental protection has been taken in a number of other seas of the world. The present regional effort should be viewed as part of a long-term programme to promote regional action which will contribute to the protection and management of the global oceans. In order to formalize and secure a regional commitment, a regional convention for marine environment protection should be negotiated. The agreement should be programmatic, laying down guidelines for government action and reflecting the priorities and activities of the regional action plan.

Annex I

PARTICIPATION IN INTERNATIONAL CONVENTIONS DEALING WHOLLY OR PARTLY WITH THE  
PROTECTION AND MANAGEMENT OF THE MARINE AND COASTAL ENVIRONMENT

	Bangladesh	India	Maldives	Pakistan	Sri Lanka
1. UNCLOS 1982	S	S	S	S	S
2. OILPOL 1954, as amended 1962-1969*	X	X	X		X
3. OILPOL Amendments, 1971					
4. MARPOL 1973*					
5. MARPOL PROT. 1978*					
6. COLREG 1972					
7. SOLAS 1974*	X	X	X		X
8. SOLAS 1978*					
9. SOLAS 1981					
10. INTERVENTION 1969	X				X
11. INTERVENTION PROT. 1973					
12. CLC 1969*			X		X
13. CLC PROT. 1976*			X		X
14. FUND 1971*			X		X
15. L. NUCLEAR 1962					
16. CL. NUCLEAR 1971*					
17. LL SHIPOWNERS 1957*					
18. LL SHIPOWNERS PROT. 1979					
19. LL 1976					
20. HIGH SEAS 1958*					
21. CONTINENTAL SHELF 1958*					
22. DUMPING 1972*					
23. DUMPING AMENDMENTS 1978					
24. NUCLEAR TESTS 1963*		X			X
25. NUCLEAR SEABED 1971*		X			
26. ENVIRONMENTAL MOD. 1976*	X	X			X
27. CITES 1973*	X	X		X	X
28. MIGRATORY SPECIES 1979*		X			
29. IPPC 1952*	X	X		X	X
30. RAMSAR 1971*		X		X	
31. NATURAL HERITAGE 1972*	X	X		X	X
32. WHALING 1946*		X			

Annex II

NATIONAL ENVIRONMENTAL LEGISLATION

Bangladesh

Antiquities Act, 1968  
Environmental Pollution Control Ordinance, 1977  
Forest Act, 1927  
Mines Act, 1923  
Pesticides Rules, 1984 (draft)  
Petroleum Act, 1974  
Territorial Waters and Maritime Zones Act, 1974  
Water Pollution Control Act, 1973  
Wildlife Preservation Order, 1973

Maldives

Legislation concerning export of ornamental fish  
Legislation restricting coral and sand mining  
Legislation restricting export of coral products and turtle shells  
Sanitation Code for Tourist Resorts

India

Air (Prevention and Control of Pollution) Act, 1981  
Ancient Monument and Archaeological Sites and Remains Act, 1958  
Antiquities and Art Treasure Act, 1972  
Coast Guard Act  
India Ports Act  
Industrial Development and Regulation Act  
Insecticides Act  
Merchant Shipping Act  
Territorial Waters, Continental Shelf, EEZ and other Maritime Zones Act, 1976  
Water (Prevention and Control of Pollution) Act, 1974  
Wildlife Protection Act, 1972

Pakistan

Agricultural Pesticides Ordinance, 1971  
Antiquities Act, 1975  
Environmental Protection Ordinance, 1983  
Wildlife legislation

Sri Lanka

Chank Fishery Act, 1953  
Coast Conservation Act, 1983  
Fauna and Flora Protection Ordinance  
Fisheries Act, 1979  
Marine Pollution Preservation Act  
Maritime Zones Law, 1976  
National Aquatic Resources Research and Development Act, 1981  
National Environmental Act, 1980  
Pearl Fisheries Ordinance, 1925  
Shrimp and Spiny Lobster Regulations, 1973  
Whaling Ordinance, 1936

Annex III

PRELIMINARY DRAFT CONVENTION FOR THE PROTECTION AND MANAGEMENT OF THE  
MARINE AND COASTAL ENVIRONMENT OF THE SOUTH ASIAN SEAS

PREAMBLE

The Contracting Parties,

Fully aware of the economic and social value of the marine and coastal environment of the South Asian Seas region;

Conscious of their responsibility to preserve their natural heritage for the benefit and enjoyment of present and future generations;

Recognizing the special hydrographic and ecological characteristics of the region which require special care and responsible management;

Recognizing further the threat to the marine and coastal environment, its ecological equilibrium, resources and legitimate uses posed by pollution and by the insufficient integration of an environmental dimension into the development process;

Seeking to ensure that resource development shall be in harmony with the maintenance of the environmental quality of the region and the evolving principles of sustained resource management;

Realizing fully the need for co-operation amongst themselves and with competent regional and international organizations in order to ensure a co-ordinated and comprehensive development of the natural resources of the region;

Recognizing the desirability of promoting the wider acceptance and national implementation of existing international environmental agreements;

Noting, however, that existing international conventions concerning the marine and coastal environment do not cover, in spite of progress achieved, all aspects and sources of marine pollution and environmental degradation and do not entirely meet the special requirements of the South Asian Seas;

Desirous to adopt a regional convention as the legal framework within which to implement the Action Plan for the Protection and Development of the Marine and Coastal Environment of the South Asian Seas adopted at ..... on .....

Have agreed as follows:

Article 1

GEOGRAPHICAL COVERAGE

1. This Convention shall apply to the South Asian Seas, hereinafter referred to as "the Convention area" as defined in paragraph (a) of article 2.

[2. The Convention area shall include the internal waters of the Parties related to the marine and coastal environment.]

[2. Except as may be otherwise provided in any protocol to this Convention the Convention area shall not include internal waters of the Contracting Parties.]



### Commentary

This article introduces the concept of the geographic area to which the regional convention will apply. More precise limits of the area referred to in paragraph 1 are to be defined in article 2 of the Convention entitled, "Definitions".

The first alternative for paragraph 2 takes into account the fact that a particularly important part of pollutants reaching the marine and coastal environment reach the sea through internal waters and originate from land-based sources, coastal dumping, and ship and port discharges. Also, degradation caused by soil erosion and siltation transported to the coast by rivers is a major cause of environmental stress in the region. It is strongly recommended that consideration be given to the inclusion of internal waters related to the marine and coastal environment in the area of application of the Convention. As an alternative, it is possible to exclude internal waters from the general application of the Convention but to extend the application in specific protocols or annexes when this is considered necessary in the light of the source of pollution or environmental problem being addressed.

While the Oslo and Helsinki Conventions do not include the Parties' internal waters within the Convention area, the Parties to the Helsinki Convention "undertake, without prejudice to their sovereign rights, to ensure that the purposes of the ..... Convention will be obtained in (internal) waters". (Helsinki Convention, article 4.3).

The Paris Convention, which is concerned with land-based sources of pollution, does not include internal waters extending, in the case of watercourses, up to the freshwater limit.

The Abidjan Convention covers the marine environment, coastal zones and related inland waters falling within the jurisdiction of the States of the West and Central African region.

The Barcelona, Cartagena, Jeddah, Kuwait and Nairobi Conventions offer models of the second alternative referred to above. While the area of application of the Convention does not include internal waters, provision is specifically made in the Convention for any protocol to provide otherwise.

It should be emphasized that the application and enforcement of the provisions of the Convention, protocols, and annexes in internal waters as well as in all areas falling within the national jurisdiction of a coastal State will be the exclusive responsibility of that State.

### Article 2

#### DEFINITIONS

For the purposes of this Convention:

#### Alternative 1

(a) "The Convention area" means the marine and coastal environment of the [South Asian Seas] [Indian Ocean] within a line following .....

#### Alternative 2

(a) "The convention area" shall be comprised of the marine and coastal environment of the [South Asian Seas] [Indian Ocean] falling within the jurisdiction of the Contracting Parties to the Convention.

#### Commentary

Most regional Conventions, such as the Oslo, Paris, Helsinki, Jeddah and Kuwait Conventions define their area of application by means of geographical co-ordinates. This is the more precise of the two alternatives presented above, and if the Parties wish to follow that pattern, then it will be necessary to agree upon the exact boundaries of the area to which the Convention will apply.

For purposes of the Abidjan Convention, the Contracting Parties chose a less specific definition. As already noted above, the Abidjan Convention applies to the marine environment, coastal zones and related inland waters falling within the jurisdiction of the States of the West and Central African region which have become Contracting Parties to the Convention.

For the Lima Convention the sphere of application has been defined as "the sea and coastal area..... within the 200 mile maritime area of sovereignty and jurisdiction of the High Contracting Parties and, beyond that area, the high seas up to a distance within which pollution of the high seas may affect that area."

For the Nairobi Convention, the Convention area is defined as comprising "the marine and coastal environment of that part of the Indian Ocean situated within the Eastern African region and falling within the jurisdiction of the Contracting Parties to this Convention. The extent of the coastal environment to be included within the Convention area shall be indicated in each protocol to this Convention taking into account the objectives of the protocol concerned."

For the Cartagena Convention a hybrid formula was reached as it involves a precise limit for the north eastern extent of the region but refers more generally to 200 nautical miles from the coasts of certain States as an outer limit for the eastern boundary of the region.

Regardless of which alternative may be chosen by the parties to the Convention for the South Asian Seas, it is useful to recall that as a basic rule of international law, codified in article 34 of the Vienna Convention on the Law of Treaties, "a treaty does not create either obligations or rights for a third State without its consent." Therefore the regional convention would only bind States party to the Convention. The Convention would not limit the activities within the region of other States beyond the obligations of international law unless such States were to become parties to the agreement. While under international law, national law may be invoked for certain activities in areas of national jurisdiction of a coastal State, the regional agreement would not place additional obligations upon States not party to the agreement in areas of the region outside the national jurisdiction of the Parties.

The terms "South Asian Seas" and "Indian Ocean" have been included in brackets in order to indicate that a choice should be made between the two. Since in paragraph 1 of article 1 it is stated that "this Convention shall apply to the South Asian Seas", the experts may wish to consider the possibility of referring in the definition to the marine and coastal environment of the sea area concerned: i.e., the Indian Ocean.

(b) "Pollution" means the introduction by man, directly or indirectly, of substances or energy into the marine environment (including estuaries) resulting in such deleterious effects as harm to living resources, hazards to human health, hindrance to marine activities, including fishing, impairment of quality for use of sea water and reduction of amenities.

#### Commentary

For this purpose the above definition of marine pollution formulated by the Joint Group of Experts on the Scientific Aspects of Marine Pollution (GESAMP) has been used in many Conventions, including the Abidjan, Barcelona, Cartagena, Helsinki, Kuwait and Nairobi Convention.

It may be noted that for the purposes of the Convention on the Law of the Sea, as well as for the Jeddah and Lima Conventions, the scope of the definition has been widened.

The definition used in the Law of the Sea text is as follows:

"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 and marine life, 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."

(c) "Organization" means the body designated as responsible for carrying out secretariat functions pursuant to article 16 of this Convention.

#### Commentary

The term "Organization" shall refer to the body designated as responsible for carrying out the secretariat functions of the Convention and its protocols. It is recommended that the Contracting Parties designate the same organization as that identified as responsible for the overall co-ordination of the implementation of the action plan.

### Article 3

#### GENERAL PROVISIONS

1. The Contracting Parties may enter into bilateral or multilateral agreements, including regional or subregional agreements, for the protection and management of the marine and coastal environment of the Convention area. Such agreements shall be consistent with this Convention and in accordance with international law. Copies of such agreements shall be communicated to the Organization and, through the Organization, to all Contracting Parties to this Convention.
2. Nothing in this Convention or its protocols shall be deemed to affect obligations assumed by a Contracting Party under agreements previously concluded.
3. This Convention and its protocols shall be construed in accordance with international law relating to their subject matter. Nothing in this Convention and its protocols shall prejudice the present or future claims and legal views of any Contracting Party concerning the nature and extent of its maritime jurisdiction.

#### Commentary

The Contracting Parties may wish to develop bilateral or subregional agreements on specific topics or covering a limited area that are complementary to, or supportive of, the general objectives of the Convention. A similar provision has been included in the Abidjan, Barcelona, Cartagena, Jeddah, Lima and Nairobi Convention.

A disclaimer article concerning obligations assumed under other agreements and general principles of international law is often included in international agreements relating to the protection of the marine environment, especially since work began on the development of the United Nations Convention on the Law of the Sea. Such a provision may be found in the Abidjan, Barcelona, Cartagena, Helsinki, Jeddah, Kuwait and Nairobi Conventions.

### Article 4

#### GENERAL OBLIGATIONS

1. The Contracting Parties shall, individually or jointly, take all appropriate measures in

conformity with international law and in accordance with this Convention and those of its protocols in force to which they are party, to prevent, reduce and combat pollution of the Convention area and to ensure sound environmental management of natural resources, using for this purpose the best practicable means at their disposal, and in accordance with their capabilities;

2. The Contracting Parties shall co-operate in the formulation and adoption of protocols to facilitate the effective implementation of this Convention.

3. The Contracting Parties shall take all appropriate measures in conformity with international law for the effective discharge of the obligations prescribed in this Convention and its protocols and shall endeavour to harmonize their policies in this regard.

4. The Contracting Parties shall co-operate with the competent international, regional and sub-regional organizations to establish and adopt recommended practices, procedures and measures to prevent, reduce and combat pollution from all sources and to promote sustained resource management in conformity with the objectives of this Convention and its protocols, and to assist each other in fulfilling their obligations under this Convention and its protocols.

5. In taking measures referred to in paragraph 1 the Contracting Parties shall act so as not to transfer, directly or indirectly, damage or hazards from one location to another or to transform one type of pollution into another.

#### Commentary

The paragraphs 1, 2 and 3 above set forth basic obligations with respect to the prevention and control of marine pollution in the region and to sound environmental management of the marine and coastal areas. Such obligations concerning prevention and control of pollution are common in other regional Conventions, such as the Abidjan, Barcelona, Cartagena, Helsinki, Kuwait and Nairobi Conventions. Article 194 of the Convention on the Law of the Sea also contains a general provision concerning measures to prevent, reduce and control pollution of the marine environment.

Parties to the Abidjan, Cartagena and Nairobi Conventions included the principle of environmental management in the scope of their Convention to reflect the broader scope of the regional action plans. Other conventions have mostly been limited to pollution control. It is suggested that the scope of the proposed Convention for the South Asian Seas also include the principle of environmental management within its terms in order to reflect the full scope of the proposed action plan.

Paragraph 5 above is a logical complement to the general obligation of States to protect the environment as a whole. Similar provisions may be found in the Abidjan, Kuwait, Oslo, Paris and Nairobi Conventions, and in article 195 of the Convention on the Law of the Sea.

#### Article 5

##### POLLUTION FROM SHIPS

The Contracting Parties shall take all appropriate measures to prevent, reduce and combat pollution of the Convention area caused by discharges from ships and, for this purpose, to ensure the effective implementation of the applicable international rules and standards established by the competent international organization.

#### Commentary

In view of the international nature of maritime transport, regulation of problems concerning pollution from vessels is best accomplished on a global basis. The Contracting Parties should be urged to apply existing international conventions related to controlling pollution from ships on the national and regional level so as to control pollution of their coasts by vessel discharges. In particular, the International Convention for the Prevention of Pollution from Ships, 1973, as modified by its Protocol of 1978, (MARPOL 73/78) provides an up-to-date and comprehensive package of measures to protect the marine and coastal environment of the South Asian Seas from operational pollution by oil and other harmful substances.

A similar provision concerning pollution from ships may be found in the Abidjan, Barcelona, Cartagena, Jeddah, Juwait, Lima and Nairobi Conventions.

#### Article 6

##### POLLUTION CAUSED BY DUMPING

The Contracting Parties shall take all appropriate measures to prevent, reduce and combat pollution of the Convention area caused by dumping of wastes and other matter at sea from ships, aircraft, or man-made structures at sea, and to ensure the effective implementation of international rules, standards and recommended practices and procedures.

#### Commentary

The 1972 London Dumping Convention regulates the introduction of wastes and other matter into the sea by dumping. It provides a global basis for the application of sea-disposal principles and practices with regard to the dumping of wastes. It also provides a framework for co-ordination and technical assistance needed to harmonize controls applied at regional and national levels. Accordingly, the Consultative Meeting of Contracting Parties to the London Dumping Convention adopted in February 1983 a resolution emphasizing, in particular, the value of the London Dumping Convention for the protection of the marine environment and waste management and urging all States to become party to the London Dumping Convention.

"Wastes and other matter" as defined in the London Dumping Convention includes a wide range of substances, such as dredged material sewage sludge, liquid and solid industrial wastes. In the light of future coastal development in the region, Governments may find themselves considering whether to expand their dumping activities which may currently be limited to dredged material, sewage sludges and industrial wastes. The London Dumping Convention recognizes in its article II that Contracting Parties implementing it do so "according to their scientific, technical and economic capabilities". Consequently, States should not be discouraged from becoming Contracting Parties as a result of their limited scientific or technical capabilities. Indeed problems which developing States may face with regard to their ability to comply fully with the requirements of the London Dumping Convention due to a lack of adequate technology and resources could be minimized through assistance provided in accordance with the provisions set out in article IX of the London Dumping Convention, which reads as follows:

"The Contracting Parties shall promote, through collaboration within the Organization and other international bodies, support for those Parties which request it for:

- (a) the training of scientific and technical personnel;
- (b) the supply of necessary equipment and facilities for research and monitoring; and
- (c) the disposal and treatment of waste and other measures to prevent or mitigate pollution caused by dumping.

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

In addition to becoming parties to the global agreement, it is recommended that the States of the region consider whether the 1972 London Dumping Convention provides adequate measures to prevent and control pollution by dumping in the Convention area or whether certain ecological or oceanographical conditions or particular activities carried out in the region call for specific measures. If so, detailed provisions may be set forth in a separate protocol to this Convention. Specific reference has been made in the London Dumping Convention to the development of regional agreements. Specifically, article VIII of the London Dumping Convention reads as follows:

"In order to further the objectives of this Convention, the Contracting Parties with common interests to protect in the marine environment in a given geographical area shall endeavour, taking into account characteristic regional features, to enter into regional agreements consistent with this Convention for the prevention of pollution, especially by dumping. The Contracting Parties to the present Convention shall endeavour to act consistently with the objectives and provisions of such regional agreements, which shall be notified to them by the Organization. Contracting Parties shall seek to co-operate with the Parties to regional agreements in order to develop harmonized procedures to be followed by Contracting Parties to the different conventions concerned. Special attention shall be given to co-operation in the field of monitoring and scientific research."

The development of a regional protocol concerning the prevention of marine pollution by dumping would not only enable States to take into account characteristic regional features but also to react quickly to emergencies and in cases where special problems will have to be solved.

General provisions concerning pollution caused by dumping are to be found in the Abidjan, Barcelona, Cartagena, Helsinki, Kuwait and Nairobi Conventions. For the Mediterranean Sea, a separate protocol for the prevention of pollution by dumping was adopted at the same time as the Barcelona Convention. The Oslo Convention deals solely with the dumping of wastes at sea.

#### Article 7

##### POLLUTION FROM LAND-BASED SOURCES

The Contracting Parties shall take all appropriate measures to prevent, reduce and combat pollution of the Convention area caused by coastal disposal or by discharges emanating from rivers, estuaries, coastal establishments, outfall structures, or any other sources within their territories.

#### Commentary

Pollution from land-based sources, including agricultural, domestic, and industrial waste, has been recognized as a source of pollution in the region. In view of the probability that the threat of pollution from this source is likely to increase as development activities continue, and of the close link between this type of pollution and environment management and development policies, it is suggested that a separate protocol to control land-based sources of pollution eventually be prepared to complement and strengthen the Convention. Technical projects and data-generating activities concerning land-based sources of pollution to be developed under the action plan should provide a substantial technical base on which to negotiate such a protocol.

In addition, precedents for detailed obligations may be found within the framework of the Helsinki and Paris, and in protocols related to the Barcelona and Lima Conventions. Global guidelines/principles for the protection of the marine environment against pollution from land-based sources have been adopted by the UNEP Governing Council.

## Article 8

### POLLUTION FROM SEABED ACTIVITIES

The Contracting Parties shall take all appropriate measures to prevent, reduce and combat pollution of the Convention area resulting directly or indirectly from exploration and exploitation of the seabed and its subsoil.

#### Commentary

There is at present no extensive production of oil in the region. Most States, however, expect to be exploring for offshore oil, if only on a limited scale, during the coming decade. In this respect, financial resources have been allocated by most Governments for offshore exploration. While pollution resulting from seabed activities is presently only covered by a general provision in the 1958 Convention on the Continental Shelf, article 208 of the Convention of the Law of the Sea calls upon States to establish global and regional rules, standards and recommended practices and procedures to prevent pollution arising from seabed activities subject to their jurisdiction. A provision similar to the one proposed is to be found in the Abidjan, Barcelona, Cartagena, Jeddah, Helsinki, Kuwait, Lima and Nairobi Conventions.

It is also useful to note that a Convention on Civil Liability for Oil Pollution Damage from Offshore Operations was adopted by the coastal States of the Northeast Atlantic in 1977. This Convention is not yet in force. On the global level, a study on the legal aspects concerning the environment related to offshore mining and drilling carried out within the limits of national jurisdiction was prepared by the UNEP working group of experts on environmental law. The working group adopted a set of 42 conclusions, including guidelines to assist States when formulating national legislation or undertaking negotiations concerning prevention of pollution caused by offshore mining and drilling.

In view of the possibility that seabed activities will be a source of pollution in the region, a separate protocol may be developed at a later stage. The protocol could usefully be concerned with standards, operating procedures, contingency planning, equipment, insurance and other required safety measures.

## Article 9

### AIRBORNE POLLUTION

The Contracting Parties shall take all appropriate measures to prevent, reduce and combat pollution of the Convention area resulting from discharge into the atmosphere from activities under their jurisdiction.

#### Commentary

This article takes into account article 212 of the Convention on the Law of the Sea. While in the Helsinki Convention the transport of pollutants through the atmosphere is referred to under land-based sources of pollution, the Convention on the Law of the Sea provides an important precedent to consider pollution from or through the atmosphere as a separate, distinct source of pollution. This has been done in the cases of the Abidjan, Cartagena, Lima and Nairobi Conventions.

Under the Barcelona Convention, like the Helsinki Convention, there is not a distinct reference to pollution from or through the atmosphere in the framework convention. However, during negotiations on the protocol concerning land-based sources of pollution, several delegations

called for a separate protocol concerning pollution from or through the atmosphere to be developed. This view was not supported by all parties. In the end, the protocol concerning pollution from land-based sources was adopted with a provision calling for the future adoption of an additional annex to the protocol which will be concerned with pollution from land-based sources transported by the atmosphere.

In view of the early stages of scientific research into the sources, pathways and quantities of pollutants reaching the marine environment from the atmosphere, the Contracting Parties will most likely wish to wait until more scientific data is available on the nature and extent of pollution of the region from or through the atmosphere before proceeding to develop specific control measures. However, it is suggested that it would be useful in the text of the Convention to follow the precedent of the Convention on the Law of the Sea and to include a distinct article on pollution from or through the atmosphere.

#### Article 10

##### SPECIALLY PROTECTED AREAS

The Contracting Parties shall, individually or jointly, take all appropriate measures to protect and preserve rare or fragile ecosystems as well as depleted, threatened or endangered species of wild fauna and flora and their habitats in the Convention area. To this end the Contracting Parties shall establish protected areas, such as parks and reserves, and prohibit or regulate any activity likely to have adverse effects on the species, ecosystems or biological processes that such areas are established to protect. The establishment of such areas shall not affect the rights of other Contracting Parties and third States.

#### Commentary

A general provision concerning rare or fragile ecosystems and endangered species is to be found in article 194 of the Convention on the Law of the Sea. The Abidjan, Cartagena and Nairobi Conventions contain a provision similar to the one above.

The national focal points of the South Asian Seas States have emphasized their concern for proper management of sensitive ecosystems, such as coral reefs, mangroves, and lagoons and for the development of a planned regional network of reserves and protected areas so as to help maintain the living resources vital to development in the region, and in particular, to protect threatened or endangered species. A separate draft protocol on this matter has been prepared for consideration by the meeting of experts.

The Contracting Parties to the Barcelona Convention have adopted a separate protocol on Mediterranean specially protected areas. A protocol concerning protected areas and wild fauna and flora in the Eastern African region was adopted in 1985 together with the Nairobi Convention.

#### Article 11

##### CO-OPERATION IN COMBATING POLLUTION IN CASES OF EMERGENCY

1. The Contracting Parties shall co-operate in taking all necessary measures to respond to pollution emergencies in the Convention area, whatever the cause of such emergencies, and to reduce or eliminate pollution or the threat of pollution resulting therefrom. To this end, the Contracting Parties shall, individually and jointly, develop and promote contingency plans for responding to incidents involving pollution or the threat thereof in the Convention area.



2. When a Contracting Party becomes aware of a case in which the Convention area is in imminent danger of being polluted or has been polluted, it shall immediately notify other States likely to be affected by such pollution, as well as competent international organizations. Furthermore, it shall inform, as soon as feasible, such other States and the Organization of any measures it has taken to minimize or reduce pollution of the threat thereof.

#### Commentary

The South Asian Seas lies within or adjacent to the world's major maritime transportation route for crude oil. Therefore, there is always a risk that a serious large spill may occur as a result of a tanker accident. In addition, with the present offshore exploration that is being carried out and the fact that this type of exploration would be expanded in the future there always is a possibility that a spill could result from a well blow-out. At present, there is little capacity in the region to control oil spills or to respond quickly in the event of a major accident. The action plan calls for the development of national contingency plans integrated with a regional control plan to minimize the effects of major oil spills. Articles 198 and 199 of the Convention on the Law of the Sea are concerned with this matter. The Abidjan, Barcelona, Cartagena, Jeddah, Kuwait, Lima and Nairobi Conventions contain similar provisions. For each of those conventions a separate protocol concerned with co-operation in combating pollution in cases of emergency has been adopted concurrently with the Convention.

#### Article 12

##### ENVIRONMENTAL DAMAGE FROM ENGINEERING ACTIVITIES

The Contracting Parties shall take all appropriate measures to prevent, reduce and combat environmental damage in the Convention area, in particular the destruction of marine and coastal ecosystems, caused by engineering activities such as land reclamation, mining and dredging.

#### Commentary

The destruction of coral reefs and mangroves is an environmental problem in a majority of the States of the region. Sand removal from beaches leads to beach loss and coastal erosion. Dredging of sand and coral from the reef or lagoon bottom destroys fisheries resources and causes pollution. Loss of mangrove forests can reduce marine biological productivity of living resources, such as shrimp. It is important that coastal and upland human activities be carried out taking into account the environmental effects on the marine and coastal environment.

The Abidjan, Jeddah, Kuwait, Lima and Nairobi Conventions contain analogous provisions concerning coastal engineering and mining activities.

#### Article 13

##### ENVIRONMENTAL IMPACT ASSESSMENT

1. As part of their environmental management policies, the Contracting Parties shall, in co-operation with competent regional and international organizations, develop technical and other guidelines to assist the planning of their major development projects in such a way as to prevent or minimize harmful impacts on the Convention area.

2. Each Contracting Party shall assess, within its capabilities, the potential environmental effects of major projects which it has reasonable grounds to expect may cause substantial pollution of, or significant and harmful changes to, the Convention area.

3. With respect to the assessments referred to in paragraph 2, the Contracting Parties shall, in consultation with the Organization, develop procedures for the dissemination of information and, if necessary, for consultations among the Contracting Parties concerned.

#### Commentary

With the prospect of accelerated development and industrialization in the region, it is suggested that the Convention provide for environmental impact assessment procedures and consultation among the parties and the Organization to prevent or reduce any serious harmful impact of proposed major projects in the region. Emphasis has been given to the importance of environmental impact analysis in the action plan.

Article 206 of the Convention on the Law of the Sea calls upon States to endeavour to assess the effects of planned activities that may cause substantial pollution of, or significant and harmful changes to, the marine environment. The Abidjan, Cartagena, Kuwait, Lima and Nairobi Conventions also contain provisions concerning environmental impact assessment.

#### Article 14

##### SCIENTIFIC AND TECHNICAL CO-OPERATION

1. The Contracting Parties shall co-operate, directly or with the assistance of competent regional and international organizations, in scientific research, monitoring, and the exchange of data and other scientific information relating to the purposes of this Convention and its protocols.

2. To this end, the Contracting Parties shall develop and co-ordinate their research and monitoring programmes concerning pollution and natural resources in the Convention area and shall establish, in co-operation with competent regional and international organizations, a regional network of research centres and institutes to ensure compatible results. With the aim of further protecting the Convention area, the Contracting Parties shall endeavour to participate in international arrangements for research and monitoring outside the Convention area.

3. The Contracting Parties shall co-operate, taking into account their capabilities, directly or through competent regional and international organizations, in the provision to other Contracting Parties of technical and other assistance in fields relating to pollution and sound environmental management of the Convention area.

#### Commentary

In order to protect and manage rationally the marine and coastal environment of the region, a co-ordinated effort is required to monitor and assess the state of the environment so that the levels and types of pollutants and their effects on man and living resources may become known. Such studies, in order to be effective, must be carried out according to systematic and compatible procedures. In organizing such a programme, optimal use should be made of existing national and regional capabilities.

The action plan calls for the implementation of environmental assessment activities and initial priority areas of concern have been identified in the plan.

Article 204 of the Convention on the Law of the Sea calls upon States to observe, measure, evaluate and analyze, by recognized methods, the risks or effects of pollution of the marine environment. The Abidjan, Barcelona, Cartagena, Helsinki, Jeddah, Kuwait, Lima, Nairobi, Oslo and Paris Conventions contain similar provisions.

In addition to co-operation in promoting research and monitoring programmes, the States of the region may usefully co-operate with each other, and with the assistance of regional and international organizations, in such activities as training of scientific and technical personnel, the supply of equipment and facilities for research, the development of contingency plans, and the planning of coastal area development and management. Provision is made in the action plan for a number of activities that are aimed at promoting technical co-operation within the region.

#### Article 15

##### LIABILITY AND COMPENSATION

The Contracting Parties shall co-operate in the formulation and adoption of appropriate rules and procedures for the determination of liability and the payment of adequate and prompt compensation for damage resulting from pollution of the Convention area.

#### Commentary

There are two situations under which procedures for the determination of liability and compensation may be considered. The first concerns damages that may arise as a result of violation of the provisions of the Convention and its protocols for which there is no existing arrangement for liability and compensation. Consequently, there is a need for the development of agreed procedures when damage is caused to the territory of one Contracting Party by another Party in contravention of the provisions of the Convention.

In addition, compensation may be called into play when damage occurring to a Contracting Party is caused by a third party, such as a vessel of a flag State not party to the regional Convention, or by means that do not necessarily result from a violation of the provisions of the Convention. Certain international conventions have been developed to provide compensation in some such incidents, e.g. the 1969 International Convention on the Establishment of an International Fund for Compensation of Oil Pollution Damage. The Contracting Parties are urged to strengthen global measures to protect the region through the ratification and effective implementation of relevant international conventions.

Along with participating more actively in arrangements on the global level, the Contracting Parties may wish to consider developing a regional scheme to complement and reinforce existing international law. The Contracting Parties may wish to consider the example of the Barcelona Convention, under which discussions have been held on the development of an Inter-State Guarantee Fund to provide compensation to the parties in cases of damage to the marine environment.

Similar provisions to the one proposed above are to be found in the Barcelona, Cartagena, Helsinki, Jeddah, Kuwait, Lima and Nairobi Conventions. Article 235 of the Convention on the Law of the Sea is concerned with responsibility and liability with regard to pollution damaged.

#### Article 16

##### INSTITUTIONAL ARRANGEMENTS

1. The Contracting Parties designate ..... as the secretariat of the Convention to carry out the following functions:

- (a) prepare and convene the meetings of Contracting Parties and conferences provided for in articles 17, 18 and 19;
- (b) transmit to the Contracting Parties notifications, reports and other information received in accordance with articles 3, 11, 13, and 22;

3. Extraordinary meetings shall be convened at the request of any Contracting Party or upon the request of the Organization, provided that such requests are supported by at least ..... of the Contracting Parties. It shall be the function of the extraordinary meeting of the Contracting Parties to consider only those items proposed in the request for the holding of the extraordinary meeting.

#### Commentary

It is also necessary to decide at what intervals the regular meetings of the Contracting Parties will be held, what matters are to be considered at such meetings, and under what circumstances an extraordinary meeting may be convened.

#### Article 18

##### ADOPTION OF PROTOCOLS

1. The Contracting Parties, at a conference of plenipotentiaries, may adopt additional protocols to this Convention pursuant to paragraph 2 of article 4.
2. If so requested by..... of the Contracting Parties, the Organization shall convene a conference of plenipotentiaries for the purpose of adopting additional protocols to this Convention.

#### Commentary

It is proposed that for most of the sources of pollution or environmental management issues referred to in the Convention, the Contracting Parties will develop a protocol related to the Convention in which more detailed rules, procedures, measures and recommended practices will be set forth. Consequently, a procedure by which protocols may be adopted should be included in the Convention. Such a provision has been made in the Abidjan, Barcelona, Cartagena, Kuwait, Lima and Nairobi Conventions.

#### Article 19

##### AMENDMENT OF THE CONVENTION AND ITS PROTOCOLS

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

- (c) perform the functions assigned to it by protocols to this Convention;
- (d) consider enquiries by, and information from, the Contracting Parties and to consult with them on questions relating to this Convention and its protocols;
- (e) co-ordinate the implementation of co-operative activities agreed upon by the meeting of Contracting Parties;
- (f) ensure the necessary co-ordination with other regional and international bodies that the Contracting Parties consider competent; and
- (g) enter into such administrative arrangements as may be required for the effective discharge of the secretariat functions.

2. Each Contracting Party shall designate an appropriate authority to serve as the channel of communication with the Organization for the purposes of this Convention and its protocols.

#### Commentary

The Contracting Parties should provide in the Convention for appropriate machinery to administer the Convention and its protocols together with the action plan activities.

#### Article 17

##### MEETINGS OF THE CONTRACTING PARTIES

1. The Contracting Parties shall hold ordinary meetings once every ..... year(s). It shall be the function of the ordinary meetings of the Contracting Parties to keep under review the implementation of this Convention and its protocols and, in particular:

- (a) consider reports submitted by the Contracting Parties under article 22;
- (b) adopt, review and amend annexes to this Convention and to its related protocols, in accordance with the provisions of article 20;
- (c) make recommendations regarding the adoption of any additional protocols or amendments to this Convention or its protocols in accordance with the provisions of articles 18 and 19;
- (d) establish working groups as required to consider any matters concerning this Convention and its protocols;
- (e) assess periodically the state of the environment in the Convention area;
- (f) consider co-operative activities to be undertaken within the framework of this Convention and its protocols, including their financial and institutional implications, and to adopt decisions relating thereto; and
- (g) consider and undertake any additional action that may be required for the achievement of the purposes of this Convention and its protocols.

2. The Organization shall convene the first ordinary meeting of the Contracting Parties within ..... of the date on which the Convention enters into force in accordance with article 28.

4. Instruments of ratification, acceptance or approval of amendments shall be deposited with the Depository. Amendments adopted in accordance with paragraph 3 shall enter into force between Contracting Parties having accepted such amendments on the ..... day following the date of receipt by the Depository of the instruments of at least ..... of the Contracting Parties to this Convention or to the protocol concerned, as the case may be. Thereafter the amendments shall enter into force for any other Contracting Party on the ..... day after the date on which that Party deposits its instrument.

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 Convention or protocol as amended.

#### Commentary

It is standard for international Conventions to set forth procedures for adoption and acceptance of amendments, and precedents may be found in all Conventions referred to earlier in this document.

#### Article 20

##### ANNEXES AND AMENDMENT OF ANNEXES

1. Annexes to this Convention or to a protocol shall form an integral part of the Convention or, as the case may be, such protocol.
2. Except as may be otherwise provided in any protocol with respect to its annexes, the following procedure shall apply to the adoption and entry into force of amendments to annexes to this Convention or to annexes to a protocol:
  - (a) any Contracting Party may propose amendments to annexes to this Convention or annexes to any protocol at the meetings convened pursuant to article 17;
  - (b) such amendments shall be adopted by a ..... majority vote of the Contracting Parties to the instrument in question;
  - (c) the Depository shall without delay communicate the amendments so adopted to all Contracting Parties to this Convention;
  - (d) any Contracting Party that is unable to accept an amendment to annexes to this Convention or to annexes to any protocol shall so notify the Depository in writing with a period determined by the Contracting Parties concerned when adopting the amendment;
  - (e) the Depository shall without delay notify all Contracting Parties of notification received pursuant to the preceding sub-paragraph;
  - (f) on expiry of the period determined in accordance with sub-paragraph (d) 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; and
  - (g) a Contracting Party may at any time substitute an acceptance for a previous declaration of objection, and the amendment shall thereupon enter into force for that Party.

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 that for the adoption and entry into force of an amendment to an annex, provided that, if it entails an amendment to the Convention or a protocol, the new annex shall not enter into force until such time as that amendment enters into force.

4. Any amendment to the annex on arbitration shall be proposed and adopted, and shall enter into force, in accordance with the procedures set out in article 19.

#### Commentary

While amendments to the Convention and protocols may be considered as fundamental to the basis of regional co-operation and, therefore, require strict procedures for their adoption, amendments to the technical provisions contained in the annexes may be necessary more frequently to keep abreast with technological developments and, consequently, may usefully be made simpler. An exception to this is the annex on arbitration, the amendment of which should follow a procedure as strict as that followed for amending the principal provisions of the Convention.

#### Article 21

##### RULES OF PROCEDURES AND FINANCIAL RULES

1. The Contracting Parties shall adopt rules of procedure for their meetings.

2. The Contracting Parties shall adopt financial rules, prepared in consultation with the Organization, to determine, in particular, their financial participation in the co-operative activities undertaken for the purposes of this Convention and its protocols.

#### Commentary

It is a standard administrative procedure for the Contracting Parties to adopt rules of procedure for their meetings.

It has been expected that the regional activities to be developed under the action plan will be principally financed by participating Governments, regional organizations, international agencies and non-governmental organizations, the ultimate aim being to make the regional programme self-supporting. The States of the South Asian Seas will be called upon to reach agreement on Government financing of the regional programme as has been done in connection with all other regional seas programmes. The financial rules adopted under the Convention may usefully reflect that agreement.

#### Article 22

##### REPORTS

The Contracting Parties shall transmit to the Organization reports on the measures adopted by them in the implementation of this Convention and of protocols to which they are parties, in such form and at such intervals as is determined by the first meeting of the Contracting Parties.

#### Commentary

The submission of regular reports should assist in ensuring that the provisions of the Convention and its protocols are effectively enforced through appropriate national measures and should facilitate the harmonization of measures adopted individually by the Contracting Parties.

Article 23

SETTLEMENT OF DISPUTES

1. In case of a dispute between Contracting Parties as to the interpretation or application of this Convention or its 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 be submitted, at the request of any of those Parties, to arbitration under the conditions set out in the Annex on Arbitration.

Commentary

It is considered essential to have developed specific procedures for the settlement of disputes. Such procedures have been developed for the Barcelona, Cartagena, Nairobi and Paris Conventions. The proposed drafting foresees the application of the arbitration procedures set out in the annex as being compulsory if one party requests it. This formula has been accepted in the Paris Convention. The Kuwait Convention provides for the compulsory submission of the dispute to a judicial commission, if the States cannot settle the dispute through negotiation or any other peaceful means of their own choice. The Barcelona, Cartagena and Nairobi Conventions provide for common agreement among the parties before the dispute is submitted to arbitration.

Article 24

RELATIONSHIP BETWEEN THE CONVENTION AND ITS RELATED PROTOCOLS

1. No State may become a Contracting Party to this Convention unless it becomes at the same time a Contracting Party to at least ..... protocol(s) to the Convention. No State may become a Contracting Party to a protocol unless it is, or becomes at the same time, a Contracting Party to this Convention.

2. Decisions concerning any protocol shall be taken only by the Contracting Parties to the protocol concerned.

Commentary

In order to strengthen the commitment of the States, and recognizing the general nature of the obligations set forth in the Convention, it is recommended that all States be required to become party to at least one protocol before becoming a party to the Convention.

Article 25

SIGNATURE

This Convention [and the Protocol(s) concerning .....] shall be open for signature at ..... from ..... to ..... by any State invited as a participant in the Conference of Plenipotentiaries on the Protection and Management of the Marine and Coastal Environment of the South Asian Seas, held at ..... from ..... to .....

Commentary

Articles 25-30 are standard final clauses of international agreements.



Article 26

RATIFICATION, ACCEPTANCE AND APPROVAL

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

Article 27

ACCESSION

1. This Convention and its protocols shall be open for accession by the States referred to in article 25 as from the day following the date on which the Convention or the protocol concerned is closed for signature.
2. After the entry into force of this Convention and of any protocol, any State not referred to in article 25 may accede to the Convention and to any protocol, subject to prior approval by ..... of the Contracting Parties to the Convention or the protocol concerned.
3. Instruments of accession shall be deposited with the Depositary.

Article 28

ENTRY INTO FORCE

1. This Convention shall enter into force on the same date as the first protocol entering into force.
2. Any protocol to this Convention, except as otherwise provided in such protocol, shall enter into force on the ..... day following the date of deposit of the ..... instrument of ratification, acceptance, or approval of, or accession to, such protocol by the States referred to in article 25.
3. Thereafter, this Convention and any protocol shall enter into force with respect to any State referred to in article 25 or article 27 on the ..... day following the date of deposit of its instruments of ratification, acceptance, approval or accession.

Article 29

WITHDRAWAL

1. At any time after ..... years from the date of entry into force of this Convention with respect to a Contracting Party, that Contracting Party may withdraw from this Convention by giving written notification to the Depositary.
2. Except as may be otherwise provided in any protocol to this Convention, any Contracting Party may, at any time after ..... years from the date of entry into force of such protocol with respect to that Contracting Party, withdraw from such protocol by giving written notification to the Depositary.
3. Withdrawal shall take effect on the ..... day 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 Contracting Party.

5. Any Contracting Party which, upon its withdrawal from a protocol, is no longer a Contracting Party to any protocol to this Convention, shall be considered as also having withdrawn from the Convention itself.

#### Article 30

##### RESPONSIBILITIES OF THE DEPOSITARY

1. The Depositary shall inform the Signatories and the Contracting Parties, as well as the Organization, of:

- (a) the signature of this Convention and of its protocols and the deposit of instruments of ratification, acceptance, approval or accession;
- (b) the date on which the Convention or any protocol will come into force for each Contracting Party;
- (c) notification of withdrawal and the date on which it will take effect;
- (d) the amendments adopted with respect to the Convention or to any protocol, their acceptance by the Contracting Parties and the date of their entry into force; and
- (e) all matters relating to new annexes and to the amendment of any annex.

2. The original of this Convention and of any protocol shall be deposited with the Depositary, the Government of ....., which shall send certified copies thereof to the Signatories, the Contracting Parties and the Organization.

3. As soon as the Convention or any protocol enters into force, the Depositary shall transmit a certified copy of the instrument concerned to the Secretary-General of the United Nations for registration and publication in accordance with article 102 of the Charter of the United Nations.

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

DONE at ..... this ..... day of ..... in single copy in the English language.

### Commentary

The following annex on arbitration is based on the annex to the Nairobi Convention. It is proposed as a possible model for an annex to the present Convention in accordance with article 23.

### Arbitration

#### Article 1

Unless the agreement referred to in article 23 of the Convention provides otherwise, the arbitration procedure shall be conducted in accordance with articles 2 to 10 below.

#### Article 2

The claimant party shall notify the Organization that it requests the dispute be submitted to arbitration pursuant to paragraph 2 of article 23 of the Convention. The notification shall state the subject-matter of arbitration and include, in particular, the articles of the Convention or the protocol, the interpretation or application of which are at issue. The Organization shall forward the information thus received to all Contracting Parties to the Convention or to the protocol concerned.

#### Article 3

The arbitral tribunal shall consist of three members. Each of the parties to the dispute shall appoint an arbitrator and the two arbitrators so appointed shall designate by common agreement the third arbitrator who shall be the chairman of the tribunal. The latter shall not be a national of one of the parties to the dispute, nor have his usual place of residence in the territory of one of these parties, nor be employed by any of them, nor have dealt with the case in any other capacity.

#### Article 4

1. If the chairman of the arbitral tribunal has not been designated within two months of the appointment of the second arbitrator, the Secretary-General of the United Nations shall, at the request of either party, designate him within a further two months' period.

2. If one of the parties to the dispute does not appoint an arbitrator within two months of receipt of the request, the other party may inform the Secretary-General of the United Nations who shall designate the chairman of the arbitral tribunal within a further two months' period. Upon designation, the chairman of the arbitral tribunal shall request the party which has not appointed an arbitrator to do so within two months. After such period, he shall inform the Secretary-General of the United Nations, who shall make this appointment within a further two months' period.

#### Article 5

1. The arbitral tribunal shall render its decision in accordance with international law and in accordance with the provisions of this Convention and the protocol or protocols concerned.

2. Any arbitral tribunal constituted under the provisions of this annex shall draw up its own rules of procedure.

#### Article 6

1. The decisions of the arbitral tribunal, both on procedure and on substance, shall be taken by majority vote of its members.
2. The arbitral tribunal may take all appropriate measures in order to establish the facts. It may, at the request of one of the parties, recommend essential interim measures of protection.
3. The parties to the dispute shall provide all facilities necessary for the effective conduct of the proceedings.
4. The absence or default of a party to the dispute shall not constitute an impediment to the proceedings.

#### Article 7

The tribunal may hear and determine counterclaims arising directly out of the subject-matter of the dispute.

#### Article 8

Unless the arbitral tribunal determines otherwise because of the particular circumstances of the case, the expenses of the tribunal including the remuneration of its members, shall be borne by the parties to the dispute in equal shares. The tribunal shall keep a record of all its expenses, and shall furnish a final statement thereof to the parties.

#### Article 9

Any Contracting Party that has an interest of a legal nature in the subject-matter of the dispute which may be affected by the decision in the case, may intervene in the proceedings with the consent of the tribunal.

#### Article 10

1. The arbitral tribunal shall render its award within five months of the date on which it is established unless it finds it necessary to extend the time-limit for a period which should not exceed five months.
2. The award of the arbitral tribunal shall be accompanied by a statement of reasons. It shall be final and binding upon the parties to the dispute.
3. Any dispute which may arise between the parties concerning the interpretation or execution of the award may be submitted by either party to the arbitral tribunal which made the award or, if the latter cannot be seized thereof, to another arbitral tribunal constituted for this purpose in the same manner as the first.



Annex IV

PRELIMINARY DRAFT PROTOCOL CONCERNING PROTECTED AREAS AND  
WILD FAUNA AND FLORA IN THE SOUTH ASIAN SEAS

PREAMBLE

The Contracting Parties to the present Protocol,

Being Parties to the Convention for the Protection and Management of the Marine and Coastal Environment of the South Asian Seas, done at ..... on .....

Conscious of the danger from increasing human activities which is threatening the environment of the South Asian Seas;

Recognizing that natural resources constitute a heritage of scientific, cultural, educational, recreational and economic value that needs to be effectively protected;

Stressing the importance of protecting and, as appropriate, improving the state of the wild fauna and flora and natural habitats of the South Asian Seas, among other means by the establishment of specially protected areas in the marine and coastal environment;

Desirous of establishing close co-operation among themselves in order to achieve that objective;

Have agreed as follows:

Article 1

DEFINITIONS

For the purposes of this Protocol:

1. "Protocol area" means the Convention area as defined in paragraph (a) of article 2 of the Convention.<sup>1/</sup>
2. "Convention" means the Convention for the Protection and Management of the Marine and Coastal Environment of the South Asian Seas.
3. "Organization" means the institution referred to in paragraph (c) of article 2 of the Convention.

<sup>1/</sup> This definition would be sufficient for the purposes of the protocol only if article 2 of the Convention defines the Convention area as including the coastal environment and internal waters of the region.

## Article 2

### GENERAL UNDERTAKING

1. The Contracting Parties shall take all appropriate measures to maintain essential ecological processes and life support systems, to preserve genetic diversity, and to ensure the sustainable utilization of harvested natural resources under their jurisdiction. In particular, the Contracting Parties shall endeavour to protect and preserve rare or fragile ecosystems as well as depleted, threatened or endangered species of wild fauna and flora and their habitats in the Protocol area.

2. To this end, the Contracting Parties shall develop national conservation strategies and co-ordinate, if appropriate, such strategies within the framework of regional conservation activities.

## Article 3

### PROTECTION OF WILD FLORA

The Contracting Parties shall take all appropriate measures to ensure the protection of the wild flora species specified in annex I. To this end, each Contracting Party shall prohibit activities having adverse effects on the habitats of such species as well as the deliberate picking, collecting, cutting or uprooting of such species. Each Contracting Party shall, as appropriate, prohibit the possession or sale of such species.

## Article 4

### SPECIES OF WILD FAUNA REQUIRING STRICT PROTECTION

The Contracting Parties shall take all appropriate measures to ensure the strictest protection of the endangered wild fauna species listed in annex II. To this end, the Contracting Parties shall prohibit or strictly regulate activities having adverse effects on the habitats of such species. In particular, the following activities shall be prohibited with regard to such species:

- (a) all forms of capture, keeping or killing;
- (b) damage to, or destruction of, critical habitats;
- (c) disturbance of wild fauna, particularly during the period of breeding, rearing and hibernation;
- (d) destruction or taking of eggs from the wild or keeping these eggs even if empty; and
- (e) possession of and internal trade in these animals, alive or dead, including stuffed animals and any readily recognizable part or derivative thereof.

## Article 5

### OTHER SPECIES OF WILD FAUNA REQUIRING PROTECTION

1. The Contracting Parties shall take all appropriate measures to ensure the protection of the depleted or threatened wild fauna species listed in annex III.

2. Any exploitation of such wild fauna species shall be regulated in order to maintain the populations at optimum levels. Each Contracting Party shall develop, adopt and implement management plans for the exploitation of such species which may include:

- (a) the prohibition of the use of all indiscriminate means of capture and killing and of the use of all means capable of causing local disappearance of, or serious disturbance to, populations of a species;
- (b) closed seasons and other procedures regulating exploitation;
- (c) the temporary or local prohibition of exploitation, as appropriate, in order to restore satisfactory population levels;
- (d) the regulation, as appropriate, of sale, keeping for sale, transport for sale or offering for sale of live and dead wild animals; and
- (e) the safeguarding of breeding stocks of such species and their critical habitats in protected areas designated in accordance with article 8 of this Protocol.

#### Article 6

##### MIGRATORY SPECIES

The Contracting Parties shall, in addition to the measures specified in articles 3, 4 and 5, co-ordinate their efforts for the protection of migratory species listed in annex IV whose range extends into their territories. To this end, each Contracting Party shall ensure that the closed seasons and other measures referred to in paragraph 2 of article 5 are also applied with regard to such migratory species.

#### Article 7

##### INTRODUCTION OF ALIEN OR NEW SPECIES

The Contracting Parties shall take all appropriate measures to prohibit the intentional or accidental introduction of alien or new species which may cause significant or harmful changes to the Protocol area.

#### Article 8

##### ESTABLISHMENT OF PROTECTED AREAS

1. The Contracting Parties shall establish protected areas with a view to safeguarding the natural resources of the Protocol area and shall take all appropriate measures to protect those areas.
2. Such areas shall be established in order to safeguard:
  - (a) the ecological and biological processes essential to the functioning of the Protocol area;
  - (b) representative samples of all types of ecosystems of the Protocol area;
  - (c) populations of the greatest possible number of species of fauna and flora depending on these ecosystems; and



(d) areas having a particular importance by reason of their scientific, aesthetic, cultural or educational purposes.

3. In establishing protected areas, the Contracting Parties shall take into account, inter alia, their importance as:

(a) natural habitats, and in particular as critical habitats, for species of fauna and flora, especially those which are rare, threatened or endemic;

(b) migration routes or as wintering, staging, feeding or moulting sites for migratory species;

(c) areas necessary for the maintenance of stocks of economically important marine species;

(d) reserves of genetic resources;

(e) rare or fragile ecosystems; and

(f) areas of interest for scientific research and monitoring.

#### Article 9

##### COMMON GUIDELINES, STANDARDS OR CRITERIA

The Contracting Parties shall, at their first meeting, and in co-operation with the competent regional and international organizations, formulate and adopt guidelines, standards or criteria concerning the identification, selection, establishment and management of protected areas.

#### Article 10

The Contracting Parties, taking into account the characteristics of each protected area, shall take, in conformity with international law, measures required to achieve the objectives of protecting such an area, which may include:

(a) the organization of a planning and management system;

(b) the prohibition of the dumping or discharge of wastes or other matter which may impair the protected areas;

(c) the regulation of pleasure craft activities;

(d) the regulation of fishing and hunting and of the capture of animals and harvesting of plants;

(e) the prohibition of the destruction of plant life or animals;

(f) the regulation of any act likely to harm or disturb the fauna or flora, including the introduction of non-indigenous zoological or botanical species;

(g) the regulation of any activity involving the exploration or exploitation of the seabed or its subsoil or a modification of the seabed profile;

(h) the regulation of any activity involving a modification of the profile of the soil or the exploitation of the subsoil of the coastal area;

(i) the regulation of any archaeological activity and of the removal of any object which may be considered as an archaeological object;

- (j) the regulation of trade in and import and export of animals, parts of animals, plants, parts of plants and archaeological objects which originate in protected areas and are subject to measures of protection; and
- (k) any other measures aimed at safeguarding ecological and biological processes in protected areas.

#### Article 11

##### BUFFER AREAS

The Contracting Parties may strengthen the protection of a protected area by establishing, with the Protocol area, one or more buffer areas in which activities are less severely restricted while remaining compatible with the purposes of the protected area.

#### Article 12

##### TRADITIONAL ACTIVITIES

1. The Contracting Parties shall, in promulgating protective measures, take into account the traditional activities of their local populations in the areas to be protected. To the fullest extent possible, no exemption which is allowed for this reason shall be such as:

- (a) to endanger either the maintenance of ecosystems protected under the terms of the present Protocol or the biological processes contributing to the maintenance of those ecosystems; and
- (b) to cause either the extinction of, or any substantial reduction in, the number of individuals making up the species or animal and plant populations within the protected ecosystems, or any ecologically connected species or populations, particularly migratory, endemic, rare, depleted, threatened or endangered species.

2. Contracting Parties which allow exemptions under paragraph 1 of this article with regard to protective measures shall inform the Organization accordingly.

#### Article 13

##### FRONTIER PROTECTED AREAS

1. If a Contracting Party intends to establish a protected area contiguous to the frontier or to the limits of the zone of national jurisdiction of another Contracting Party, the two Contracting Parties shall consult each other with a view to reaching agreement on the measures to be taken and shall, among other things, examine the possibility of the establishment by the other Party of a corresponding protected area or buffer area.

2. If a Contracting Party intends to establish a protected area contiguous to the frontier or to the limits of the zone of national jurisdiction of a State which is not a party to this Protocol, the Party shall endeavour to work together with that State with a view to holding consultations as referred to in the preceding paragraph.

3. If a State which is not a party to this Protocol intends to establish a protected area contiguous to the frontier or to the limits of the zone of national jurisdiction of a Contracting Party to this Protocol, the latter shall endeavour to work together with that State with a view to holding consultations.

#### Article 14

##### PUBLICITY AND NOTIFICATION

The Contracting Parties shall give appropriate publicity to the establishment of protected areas, in particular to their boundaries and the regulations applying thereto. Such information shall be transmitted to the Organization which shall compile and maintain a current directory of protected areas in the Protocol area. The Contracting Parties shall provide the Organization with all information necessary for that purpose.

#### Article 15

##### PUBLIC INFORMATION AND EDUCATION

The Contracting Parties shall endeavour to inform the public as widely as possible of the significance and interest of protected areas and the protection of wild fauna and flora and the scientific knowledge which may be gained from them. Such information should have an appropriate place in education programmes concerning the environment, archaeology and history. The Contracting Parties should also endeavour to promote the participation of their public and their nature conservation organizations in the protection of the areas and wild fauna and flora concerned.

#### Article 16

##### REGIONAL CO-OPERATION

The Contracting Parties shall establish a regional programme to co-ordinate the selection, establishment, and management of protected areas and the protection of wild fauna and flora with a view to creating a representative network of protected areas in the Protocol area. There shall be regular exchanges of information concerning the characteristics of the protected areas and wild fauna and flora, the experience acquired and the problems encountered.

#### Article 17

##### SCIENCE AND TECHNICAL RESEARCH

1. The Contracting Parties shall encourage and develop scientific and technical research on their protected areas and on the ecosystems, wild fauna and flora, and archaeological heritage of the Protocol area.
2. The Contracting Parties shall exchange scientific and technical information concerning current or planned research and their results. They shall, to the fullest extent possible, co-ordinate their research, and define jointly or standardize the scientific methods to be applied in the selection, management and monitoring of protected areas.

#### Article 18

##### EXCHANGE OF INFORMATION

1. In applying the principles of co-operation set forth in articles 16 and 17, the Contracting Parties shall forward to the Organization:

- (a) comparable information for monitoring the biological development of the Protocol area; and
- (b) reports, inventories, publications and information of a scientific, administrative and legal nature, in particular:
  - (i) on the measures taken by the Contracting Parties in pursuance of this Protocol for the protection of the protected areas and wild fauna and flora;
  - (ii) on the wild fauna and flora present in the protected areas or listed in the annexes to this Protocol;
  - (iii) on any threats to protected areas or wild fauna and flora, especially those threats which may come from sources outside their control; and
  - (iv) on any changes in the delimitation or legal status of a protected area or the suppression of all or part of such an area.

2. The Contracting Parties shall designate managers responsible for protected areas. Those managers shall meet at least once every two years to discuss matters of joint interest and especially to propose to the Contracting Parties recommendations concerning scientific, administrative and legal measures to be adopted to improve the application of the provisions of this Protocol.

#### Article 19

##### TECHNICAL CO-OPERATION

The Contracting Parties shall co-operate, directly or with the assistance of competent regional or international organizations, in the provision to other Contracting Parties of technical and other assistance in fields related to the selection, establishment and management of protected areas and the protection of wild fauna and flora. Such assistance should relate, in particular, to the training of scientific, technical and managerial personnel and scientific research.

#### Article 20

##### ALTERATION OF THE BOUNDARIES OF, OR WITHDRAWAL OF PROTECTION FROM, PROTECTED AREAS

Changes in the delimitation or legal status of a protected area, or the suppression of all or part of such an area, shall not take place unless for significant reasons of public interest and according to a similar procedure to that followed for its establishment.

#### Article 21

##### MEETINGS OF THE CONTRACTING PARTIES

1. Ordinary meetings of the Contracting Parties to this Protocol shall be held in conjunction with ordinary meetings of the Contracting Parties to the Convention held pursuant to article 17 of the Convention. The Contracting Parties to this Protocol may also hold extraordinary meetings as provided for in article 17 of the Convention.

2. It shall be the function of the meetings of the Contracting Parties to this Protocol, in particular:

- (a) to keep under review the implementation of this Protocol;
- (b) to consider the efficacy of the measures adopted and to examine the need for other measures, in particular in the form of annexes in conformity with the provisions of article 20 of the Convention;
- (c) to adopt, review and amend as required any annex to this Protocol;
- (d) to monitor the establishment and development of the network of protected areas referred to in article 16, to adopt guidelines to facilitate the establishment and development of that system and to increase co-operation among the Parties;
- (e) to consider the recommendations made by the meeting of the managers responsible for the protected areas, as provided by article 18, paragraph 2; and
- (f) to consider, as appropriate, reports transmitted by the Contracting Parties to this Protocol to the Organization under article 22 of the Convention and any other information which the Contracting Parties to this Protocol may transmit to the Organization or to their meeting.

#### Article 22

##### RELATIONSHIP BETWEEN THIS PROTOCOL AND THE CONVENTION

1. The provisions of the Convention relating to its protocols shall apply with respect to this Protocol.
2. The rules of procedure and the financial rules adopted pursuant to article 21 of the Convention shall apply to this Protocol, unless the Contracting Parties to this Protocol agree otherwise.

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

DONE AT ..... this ..... day of ..... in a single copy in the English language.

ANNEXES TO BE DEVELOPED ON THE BASIS OF AVAILABLE TECHNICAL INFORMATION

- Annex I - Protected species of wild flora
- Annex II - Species of wild fauna requiring special protection
- Annex III - Harvestable species of wild fauna requiring protection
- Annex IV - Protected migratory species

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