OSPAR Commission for the Protection of the Marine Environment of the North-East Atlantic

Annual Report 2002 - 2003 Volume 2

Annual Report 2002 - 2003, Volume 2

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More information about OSPAR

The Convention for the Protection of the Marine Environment of the North-East Atlantic (the "OSPAR Convention") was opened for signature at the Ministerial Meeting of the former Oslo and Paris Commissions in Paris on 22 September 1992. The Convention entered into force on 25 March 1998. It has been ratified by Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, Luxembourg, Netherlands, Norway, Portugal, Sweden, Switzerland and the United Kingdom and approved by the European Union and Spain.

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Annual Report of the OSPAR Commission, 2002 – 2003

Volume 2

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Annex 1

Bremen Statement

WE, THE MINISTERS AND THE MEMBER OF THE EUROPEAN COMMISSION, meeting within the framework of the OSPAR Commission for the Protection of the Marine Environment of the North-East Atlantic, adopt this statement to set out the work of the Second Ministerial Meeting of the Commission:

- 1. Five years ago in Sintra, Portugal, Ministers set new and challenging objectives for OSPAR for the period up to 2020, aimed at bringing our marine environment within one generation to a healthy and sustainable condition.
- 2. OSPAR has responded to these new challenges by generating innovatory approaches, by exploring new areas in depth and by creating new partnerships with industry and environmental organisations. These path-finding initiatives have shown how some difficult problems in environmental protection can be addressed, and have influenced thinking in other forums.

Our purposes

- 3. With our colleagues from the Baltic Sea, we have sought to develop and integrate these approaches within wider frameworks, both
 - a. through supporting the creation of a European Marine Strategy, aimed at orchestrating the actions of all European States, the European Union and international bodies towards ambitious, clear and coherent objectives in all the fields affecting the marine environment; and
 - b. through developing Atlantic-Baltic cooperation, particularly in the common foundation of an ecosystem approach to management, as the basis of our strategies and of integrating our work, in a joint network of marine protected areas and in jointly implementing global agreements relevant to protecting the marine environment in both regions.
- 4. We now focus on issues of a special concern to the OSPAR Convention and the North-East Atlantic. Our purpose, within the specific framework of OSPAR, is to review the first five years' work towards the goals set at Sintra, to reaffirm our commitments, and to renew the mandates for further work on the five OSPAR strategies.
- 5. These strategies, together with the new Strategy for a Joint Assessment and Monitoring Programme, set the course for the sectors within OSPAR's competence crucial for protecting and conserving the North-East Atlantic, and provide OSPAR's contribution to wider work to that end.
- 6. We endorse the conclusions of the evaluation of the OSPAR strategies, re-affirm their objectives and on that basis up-date them to take account of the past five years' developments within OSPAR, the European Union and other international organisations. On this basis, we detail the work required up to 2010 to implement them and commit ourselves to providing resources. This further work will form OSPAR's contribution to the European Marine Strategy, thus providing effective support for its development.

Biodiversity and ecosystems

- 7. In the new field of protecting the marine environment against adverse impacts other than pollution, we have brought into force, with effect from 30 August 2000, the new Annex V to the OSPAR Convention on the conservation and protection of marine biodiversity and ecosystems. We look forward to the early completion of ratification by the three remaining Contracting Parties.
- 8. We endorse the Texel/Faial Criteria for the Identification of Species and Habitats in Need of Protection and the initial OSPAR List of Threatened and/or Declining Species and Habitats based upon them, in order to pursue the goals of Annex V and the related Strategy for the Protection and Conservation of Marine Biodiversity and Ecosystems. This List identifies the species and habitats on which we need at the moment to concentrate our efforts of conservation and protection. We shall now examine the ways and means by which we can achieve the

necessary protection for these species and habitats and, where the action lies within the competence of OSPAR, develop any necessary programmes and measures for these purposes. We shall also keep the list under review using the agreed criteria.

- 9. The second implementation process in this field addresses the candidate list of human activities¹ capable of causing adverse impacts on the marine environment. We note the work that has already been done to develop measures (including progress on issues relating to artificial reefs) as a result of analyses of these activities. On that basis we confirm the candidate list as the basis for further work. Based on the OSPAR background document on tourism, we accept that the aspects of tourism and recreational activities identified in that document require analysis of the need for action to protect the marine environment against their impacts.
- 10. As further products from analyses of these human activities, we endorse:
 - a. the Guidance on a Common Approach for Dealing with Applications for the Construction and Operation of Offshore Wind-Farms. We shall work further on the spatial planning across the maritime areas and on what is needed in this sector, in order to facilitate and encourage the further development of such installations in an environmentally sensitive and sustainable way. These developments can offer a significant new source of renewable energy which will help Contracting Parties to combat climate change by implementing their obligations under the Kyoto Protocol;
 - b. an agreement on controlling sand and gravel extraction.

We shall pursue the analysis of these human activities and the measures necessary in the light of this analysis. By 2010, we shall complete an assessment of the impact of all these activities and conclude what programmes and measures are required.

- 11. The third line of action to protect marine biodiversity and ecosystems is to protect specific areas. For this purpose, we endorse the Recommendation on a Network of Marine Protected Areas. Working with HELCOM and the European Community, we shall identify the first set of such areas by 2006, establish what gaps then remain and complete by 2010 a joint network of well-managed marine protected areas that, together with the NATURA 2000 network, is ecologically coherent.
- 12. We are particularly concerned about the status of vulnerable cold-water coral reefs, many of which are threatened with destruction. Bearing in mind the ecological importance of these reefs and the practical irreversibility of their damage, we shall take immediate measures to protect coral reefs from further damage due to use of active fishing gear on the reefs. Furthermore, we shall ensure that steps are taken by 2005 to identify additional threats to the cold-water reefs and that measures are taken to protect the reefs against these threats.
- 13. Fourthly, we shall create an effective tool for integrating action across the whole field, including action against pollution, in accordance with the ecosystem approach, by taking up the invitation of the Fifth North Sea Conference to complete the North Sea pilot project for a coherent suite of ecological quality objectives, and then further developing this approach for the whole maritime area, taking into account regional differences.
- 14. Finally, we shall do our utmost to take measures to eliminate the problem of marine litter by, for example, supporting the OSPAR Marine Litter Monitoring Work Programme, considering the need for the development of an environmental quality objective for marine litter and for collective action within the International Maritime Organisation to have parts of the OSPAR

Dredging for navigational purposes, other than within harbours;

Exploration for oil, gas and solid minerals;

Introduction of alien or genetically modified species, whether deliberately or unintentionally; Land reclamation;

Placement of cables and pipelines;

Placement of structures for the exploitation of oil and gas; and

Sand and gravel extraction.

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The candidate list of human activities for analysis is as follows:

Construction or placement of artificial islands, artificial reefs, installations and structures;

maritime area designated as a Special Area for the purpose of Annex V (garbage) to MARPOL 1973/78² and welcoming the initiatives undertaken under the Save the North Sea Project.

15. On the basis of these five strands of action, we shall cooperate with other relevant organisations to achieve a coherent and comprehensive programme of work, which will deliver specific protection for vulnerable species, habitats and areas. We are committed to the protection and conservation of, and sustainable management of human impacts on, the ecosystems and biological diversity throughout the whole of the maritime area. We invite the industries involved to join us in these efforts.

Eutrophication

- 16. The 2003 integrated report on the eutrophication status of the OSPAR maritime area identifies, partly on the basis of shared criteria, the areas which the coastal Contracting Parties identify as threatened by eutrophication, or likely to be so threatened if preventive action is not taken. These shared criteria will improve the consistency of our approaches to eutrophication, but there is room for further improvement. There is also a need for better delivery of the 50% reduction commitments that apply to problem areas identified³ in this way, as a contribution to achieving the 2010 goal of the Eutrophication Strategy⁴. Those of us who have identified such areas will:
 - a. in respect of problem areas, report further by 2005 on measures taken to reduce or eliminate the anthropogenic causes of eutrophication, including the achievement of the 50% reductions where relevant. This information will then be assessed in accordance with the Joint Assessment and Monitoring Programme;
 - b. report by 2005 on the preventive measures taken on potential problem areas;
 - c. determine by 2008 the status of the areas identified as potential problem areas.

We shall all review how to achieve greater consistency in identifying these areas and quantifying the various anthropogenic contributions to inputs of nutrients to these areas.

- 17. We re-emphasise the importance of common quantification and reporting procedures for calculating the reduction of nutrient inputs, and will continue to improve, and complete by 2006, the Guidelines on Harmonised Quantification and Reporting Procedures for Nutrients (HARP-NUT).
- 18. We shall use the development of the European Marine Strategy to integrate the OSPAR work on eutrophication with activities in other European and international bodies, through *inter alia* the development of ecological quality objectives, by 2005 for the North Sea and thereafter for other areas, and the harmonisation of reporting procedures, taking into account the OSPAR Guidelines (HARP-NUT).
- 19. We emphasise the importance, for achieving the goals of the OSPAR eutrophication strategy, of achieving an integrated approach across all the policy areas, including agriculture, that substantially affect the nutrient levels of European seas.

Hazardous substances

20. The dynamic selection and prioritisation mechanism, developed in accordance with the Hazardous Substances Strategy, has enabled the creation and publication of a List of Substances of Possible Concern and significant up-dating of the OSPAR List of Chemicals for Priority Action.

The International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978.

³ In accordance with PARCOM Recommendation 88/2.

The timeframe of the Eutrophication Strategy provides for implementation progressively by making every effort to combat eutrophication in the maritime area, in order to achieve, by the year 2010, a healthy marine environment where eutrophication does not occur.

- 21. We welcome the series of OSPAR background documents⁵. Through these, we identify in detail the reasons why the chemicals for priority action are causes of concern for the marine environment, the ways that they are used, the quantities in question and their route to the marine environment, what protective action is already in hand, and the most appropriate further action to achieve the target of cessation of discharges, emissions and losses of these chemicals reaching the marine environment. The common EU/OSPAR approach on risk-assessment methodology for the marine environment provides a sound basis for this work.
- 22. We confirm this twin-track approach as the appropriate way to pursue the objective of the hazardous substances strategy. Concerns for the marine environment are not, however, the only driver of work on hazardous substances. For nearly all OSPAR Contracting Parties, the EC Water Framework Directive and the development of the EC Chemicals Policy are also crucial. Switzerland is likewise developing complementary policies in this field. We shall therefore use the development of the European Marine Strategy to align the approaches to policy on hazardous substances in the different fields and to focus OSPAR work on the specific areas in which OSPAR can add value.
- 23. In this context, we note that further efforts are required to meet the objectives of the OSPAR Hazardous Substances Strategy and its 2020 cessation target. We acknowledge that different, but complementary, one-generation targets have been included in the Plan of Implementation of the World Summit on Sustainable Development and in the EC Water Framework Directive. In the further development of the EC Chemicals policy we encourage the European Community:
 - a. to take full account of the need to protect the marine environment;
 - b. to take account of our commitments to move towards the cessation of emission, discharges and losses of hazardous substances;
 - to promote the substitution of hazardous substances with safer alternatives, including promoting and facilitating the development of such alternatives where they do not currently exist;
 - d. to ensure that purchasers and consumers are provided with information on hazardous substances in goods, to help reduce the risks from them.

24. We shall ensure that:

- a. OSPAR continues to make certain that hazardous substances that cause concern for the marine environment continue to be identified;
- b. the range of measures adopted by the various authorities and bodies concerned are adequate both to deliver the general obligations of the OSPAR Convention to protect and conserve the marine environment and to move by 2020 towards the cessation target;
- a comprehensive and coherent assessment is made of progress towards the objectives of the OSPAR Hazardous Substances Strategy and its 2020 cessation target;
- d. where a shortfall is identified, action is taken to make it good.

-

Background documents (prepared with the specified Contracting Party in the lead) have been approved for publication on: brominated flame retardants (Sweden); cadmium (Spain); dicofol (Finland); dioxins and furans (Belgium and Denmark); endosulphan (Germany); lead and organic lead compounds (Norway); lindane (Germany); mercury and organic mercury compounds (United Kingdom); methoxychlor (Finland); musk xylene and other musks (Switzerland); nonylphenol and nonylphenol ethoxylates (Sweden); octylphenol (United Kingdom); organic tin compounds (the Netherlands); pentachlorophenol (Finland); polychlorinated biphenyls (Belgium and Germany); polycyclic aromatic hydrocarbons (Norway); short-chain chlorinated paraffins (Sweden); 4-tert-butyltoluene (Germany); trichlorobenzene, 1,2,3-trichlorobenzene and 1,2,4-trichlorobenzene (Belgium and Luxembourg); triphenylphosphine (Germany) and 2,4,6-tri-tert-butylphenol (United Kingdom).

Offshore oil and gas industry

- 25. Since the adoption of the offshore industry strategy, we have:
 - a. achieved a harmonised mandatory control system for chemicals used and discharged offshore;
 - b. tightened the measures regulating the use of drilling fluids and the discharge of cuttings contaminated by them. These re-affirm the limits on the use of diesel-based drilling fluids and on the discharge of cuttings contaminated with oil-based drilling fluids. The Decision also limits the use of organic-phase drilling fluids (OPF) and the discharge of cuttings contaminated with OPF;
 - c. established a goal of reducing by 15% the total quantity of oil discharged into the sea in produced water (that is, the water coming up from oil and gas wells) as compared with the figures for 2000. This reduction should be achieved in the year 2006, despite the expected increases (as a result of ageing wells) in the total amount of produced water to be discharged. It forms a first step towards ensuring that by 2020 discharges of produced water will present no harm to the marine environment.
- 26. In line with the strategy, we now endorse the Recommendation establishing a goal that all operators of offshore installations in the OSPAR area will have in place by the end of 2005 environmental management systems that conform to internationally recognised standards. We have not achieved the complementary aim of specifying by 2003 all the environmental goals to be achieved, but we endorse the timetable that has been adopted to ensure the specification of such goals by 2004.
- 27. We confirm that this mixture of action is effectively pursuing the objectives of the offshore industry strategy.

Radioactive substances

- 28. We welcome the development by all Contracting Parties of national plans showing how they intend to deliver the objective of the OSPAR Strategy with regard to Radioactive Substances. These detailed and specific national plans are an essential part of the way in which we implement the strategy.
- 29. We note that, if national plans are implemented as forecast, the overall level of discharges, emissions and losses will be reduced by 2020. We are, however, concerned that it has not been possible to make a final assessment whether or not the combined effects of the national plans will be sufficient to achieve the objective of the strategy.
- 30. The individual Contracting Parties concerned confirm that they will ensure the continued evolution and implementation of their national plans so as to achieve the objective of the strategy 6 in accordance with its timeframe for 2020^7 .
- 31. We endorse the revised programme for the implementation of the radioactive substances strategy, to ensure that OSPAR collectively is kept informed about the progress of the national plans and can form an overview of performance, judged against the agreed baseline.
- 32. We shall progressively assess collectively, based on a methodology to be completed by 2006, whether or not the combined effects of the national plans are sufficient to achieve the objective of the strategy within its time frame.

The objective is "to prevent pollution of the maritime area from ionising radiation through progressive and substantial reductions of discharges, emissions and losses of radioactive substances, with the ultimate aim of concentrations in the environment near background values for naturally occurring radioactive substances and close to zero for artificial radioactive substances. In achieving this objective, the following issues should, *inter alia*, be taken into account: (a) legitimate uses of the sea; (b) technical feasibility; and (c) radiological impacts on man and biota."

This timeframe is that "by the year 2020 the Commission will ensure that discharges, emissions and losses of radioactive substances are reduced to levels where the additional concentrations in the marine environment above historic levels, resulting from such discharges, emissions and losses, are close to zero."

- 33. We note the concerns expressed by a number of Contracting Parties about discharges of technetium-99 from Sellafield and their view that these discharges should cease immediately. We welcome the recent initiative of the United Kingdom to request the operator of Sellafield to stop discharges from the MAC treatment process for the next nine months while further research and development of abatement technology is carried out. We look forward to the introduction of such technology to treat remaining MAC if it proves to be technically feasible.
- 34. Within this process, and in the light of the MARINA II study by the European Commission, and taking into account new information from Contracting Parties and other studies, we shall ensure that discharges, emissions and losses of radioactive substances from sources outside the nuclear industry equally comply with the Radioactive Substances Strategy.

Assessment and Monitoring

- 35. We welcome the completion of the Quality Status Report 2000, and its five sub-regional reports. This was an innovatory exercise, creating a detailed, scientifically based evaluation of the state of a major region of the world's oceans. We welcome the progress achieved in some fields, but we must take to heart the serious problems which the reports reveal in particular, the environmental impacts of fisheries, hazardous substances, the impact of climate change, the introduction of non-native species through ballast-water discharges, and the need to improve our knowledge base. These give a firm basis for the actions that we are pursuing.
- 36. We adopt the Strategy for a Joint Assessment and Monitoring Programme (JAMP), and endorse the recommendation to promote its implementation. We shall aim to ensure that the implementation of the JAMP is consistent with the approaches to monitoring coastal waters under the EC Water Framework Directive. The acid test of the success of the OSPAR thematic Strategies and the over-arching ecosystem approach is whether the state of the marine environment is actually improved. This strategy will ensure that we can regularly check the progress of our thematic strategies in improving the state of the North-East Atlantic.
- 37. To that end, and following the Joint Assessment and Monitoring Programme, we shall examine in 2010 a further Quality Status Report of the whole OSPAR maritime area, as the culmination of a series of thematic assessments examining in detail the various themes of OSPAR's work.

Achieving our aims

- 38. Neither OSPAR nor its Contracting Parties on their own can ensure that the North-East Atlantic will be in a healthy and sustainable condition. This requires a sustained effort in many forums. But OSPAR provides the essential focus, both by covering many crucial sectors and by monitoring and assessing the quality status of the whole North-East Atlantic in all its aspects. We reiterate our commitment to ensuring the continuation of high-quality, dedicated efforts within the framework of OSPAR to achieve the goals that we have set.
- 39. We shall individually use the annual reports of OSPAR as a tool to evaluate regularly progress towards the goals of these strategies, and collectively we shall meet again in 2010 to review progress and set the agenda for the ensuing decade.

Annex 2

Declaration of the First Joint Ministerial Meeting of the Helsinki and OSPAR Commissions

We, the Ministers and the Member of the European Commission, meeting jointly as the Baltic Marine Environment Protection Commission (the Helsinki Commission – HELCOM) and the OSPAR Commission for the Protection of the Marine Environment of the North East Atlantic (OSPAR), stress the benefits from our friendly collaboration on issues of great concern to all members of those Commissions, which encompass both the European Community and twenty-one participating States – differing widely in their size, in their economic bases and interests, and in their relationship to the sea, spreading across Europe from Archangel to Cape St Vincent and Greenland and including Member States and candidate countries of the European Union, Member States of the European Economic Area and States and territories outside both those organisations. We have been assisted by the active participation of many non-governmental organisations as observers.

- 2. The fruits of this innovative first joint meeting of two regional seas organisations will help us work together more effectively in fulfilling our long-standing commitments to work for the conservation and sustainable use of the world's oceans and seas and, in particular, of the North East Atlantic and the Baltic Sea.
- 3. Changes in Europe the enlargement of the European Union; the increasing interdependence of the marine environments of different countries; the ever-growing public interest in, and concern for the seas; the European Union initiative to develop a strategy to conserve and protect the marine environment make it essential for us to develop and improve the ways in which we work together in HELCOM and OSPAR. In particular, we commit ourselves to work with the European Union initiative and, in collaboration with the other marine conventions, to extend and develop it, within our fields of competence, into a European Marine Strategy for the seas around Europe, which can receive the commitment of other Conventions and their Contracting Parties. Through such developments, we must exploit the possibilities for synergy between all the international bodies and national authorities involved. These developments will also enable us to deliver the commitments that we re-affirmed at the World Summit on Sustainable Development to strengthening regional cooperation and coordination between regional organisations and programmes dealing with the seas.
- 4. Further initiatives are needed to ensure the improved and sustainable marine environment that we and our fellow citizens want to see. Collaborative efforts from all the relevant international bodies, national authorities and other stakeholders are needed. To our long-standing tradition of international cooperation on individual issues, we must add a new and decisive impetus, based on an approach which matches the interlinkages within the marine ecosystems, on a determination to ensure that policies interface effectively with each other, and on clear-cut understandings of which organisation will do what. We shall integrate within our countries, the European Union and the European Economic Area the policies affecting the oceans and seas. We shall ensure that the potential impact on the marine environment is taken into account in *all* policies and programmes and we recognise that marine environment policy cannot on its own redress the problems of the marine environment resulting from pressures created by other policies these must be tackled at source.
- 5. We set out here the results of our fruitful discussion on how to promote these combined aims of protection, sustainability, concerted regional action and integration. Our joint meeting has concentrated on four issues where these aims are particularly relevant and where cooperation between the two Commissions would be productive and increase synergy applying the ecosystem approach, conserving biological diversity, species and habitats, and the environmental impacts of fisheries and of shipping. Other major issues eutrophication, hazardous substances, the environmental impact of the offshore oil and gas industry, radioactive substances, and monitoring and assessment of the marine environment vary more between the two regions, and have been addressed in the separate HELCOM declaration and OSPAR statement.

Ecosystems at the centre of our approach

- 6. Better integration of environmental objectives with economic and social goals is a basic requirement for advancing and strengthening these three interdependent and mutually reinforcing pillars of sustainable development. Our work on the conservation and protection of the marine environment must therefore form part of our management of the full range of human activities, demands and pressures placed on the North East Atlantic and the Baltic Sea Area. Since it is the ecosystems as a whole that are affected by these impacts, we must use those ecosystems as the focus of our integration.
- 7. We have already made commitments to apply and further develop ecosystem approaches to management of human activities impacting on the marine environment ("the ecosystem approach"), *inter alia*, within the Convention of Biological Diversity and at the World Summit on Sustainable Development. North Sea States reinforced their undertakings at the Fifth International Conference for the Protection of the North Sea, and agreed on a conceptual framework for an ecosystem approach. The Member States of the European Union have made further commitments in this field, including their support for the European Commission's proposal for a European Marine Strategy with an emphasis on an ecosystem approach. Other HELCOM and OSPAR States have made similar further commitments.
- 8. We will therefore by 2010 apply and further develop the measures necessary to implement an ecosystem approach, in order to give concrete effect to our commitments and help maintain and, when practicable, restore ecosystem health, integrity and services. HELCOM and OSPAR have this week adopted the statement "Towards an ecosystem approach to the management of human activities", setting out their intentions, in particular:
 - a. to continue to contribute, through our monitoring and assessment programmes, to the scientific understanding of marine ecological processes and to evaluating human impacts on the marine environment;
 - b. to ensure that our programmes and strategies reflect the ecosystem approach. This will involve developing sets of coherent and integrated ecological quality objectives as a tool for this purpose, while taking account of the different needs of sub-regional areas as shown by the HELCOM 4th Periodic Assessment of the Baltic Sea and the five sub-regional reports of the OSPAR Quality Status Report 2000 on the North-East Atlantic;
 - to implement our programmes and strategies across the whole range of the competences of the Helsinki and OSPAR Commissions, and identifying and acting on newly-emerging issues where human activities and pressures in those fields threaten marine ecosystems;
 - d. to consider in addition how to promote the conservation of the full range of species and habitats in the other parts of the maritime areas of the two Commissions;
 - e. to draw the attention of competent authorities and international bodies to threats and pressures in other fields affecting the ecosystems of the North-East Atlantic and the Baltic Sea Area:
 - f. to involve stakeholders effectively in developing and applying the ecosystem approach, both at Commission and national levels.
- 9. We are convinced that the current state of scientific knowledge, coupled with a sound application of the precautionary principle⁸, allows the immediate adoption of certain further environmental and nature-protection measures with a view to achieving sustainable use of the sea and conservation of marine ecosystems. We invite the competent authorities and international bodies in the HELCOM and OSPAR maritime areas to develop and implement progressively specific policies and measures in line with the ecosystem approach.

It is understood that, in the context of the management of fisheries, the "application of the precautionary principle" has the same result as the application of the precautionary approach, as referred to in, for example, Article 6 of the 1995 UN Fish Stocks Agreement.

Towards a European Marine Strategy

- 10. Integration is needed across a wider field than those covered by HELCOM and OSPAR. We therefore welcome the development of the European Marine Strategy⁹, as one of the means to promote the coherence and integration of the efforts of the international bodies in which the Contracting Parties to HELCOM and OSPAR participate, of the European Union and of our national authorities. This will enable all States and international organisations across the whole of Europe to focus their efforts better.
- 11. We call for the start of an inclusive debate between all stakeholders on the objectives and contents of the European Marine Strategy. HELCOM and OSPAR will support that debate in all ways that they can. In our view at this stage:
 - a. the European Marine Strategy should cover all the actions needed to ensure that all human activities with an impact upon the oceans and seas are so managed that marine biological diversity and critical habitats are conserved and our use of them is sustainable;
 - b. we are committed to the objectives set in the HELCOM recommendations and OSPAR strategies. The European Marine Strategy should build upon these foundations and should make a contribution to the achievement of their objectives;
 - c. the aim of the European Marine Strategy should be to cover all the seas around Europe (the Arctic Ocean, the Baltic Sea, the Black Sea, the Mediterranean Sea and the North-East Atlantic Ocean), but also the impact that Europe makes on the rest of the world's oceans and seas. In addition, the relevant elements of the strategy should be pursued globally.
- 12. The oceans and seas around Europe share many problems and face many common threats. But they also have numerous problems special to each of them. While we aim to address threats common to all European seas through common, cooperative approaches, the regional seas organisations will continue to have important individual roles to play. An important task for the European Marine Strategy is to set out the framework for these continuing tasks and their relationships with work in other forums. To this end, HELCOM and OSPAR have this week set out, in the statement "What HELCOM and OSPAR can bring to the European Marine Strategy", the contributions that they can make at regional level to this common enterprise.
- 13. At the regional level, we have already covered many crucial issues and integrated our approaches to them. We are convinced, however, that the European Marine Strategy should bring together all the issues relevant to the marine environment, including those mentioned in the statement by HELCOM and OSPAR.
- 14. Starting from the ecosystem approach to management, the debate on the European Marine Strategy needs to weld together the contributions from the Contracting Parties of HELCOM and OSPAR, other national administrations and the relevant international organisations to produce coherent and comprehensive commitments to deliver the objectives of the Strategy.

Conservation of biological diversity, habitats and species

- 15. We remain concerned that pressures on the marine environment from human activities will result in the destruction and loss of sensitive marine habitats or reductions in, or losses of, populations of key or sensitive species, in spite of the good work already done under the Helsinki and OSPAR Conventions, through the EC Birds and Habitats Directives, and by North Sea Conference commitments and many national measures, to conserve, protect and restore the ecosystems of the North-East Atlantic and the Baltic Sea Area.
- 16. Where species and habitats are identified as threatened, declining or in need of protection, we will take action to develop programmes and measures for their protection, where this is within the competence of HELCOM and OSPAR, and to seek action by the competent authorities in other cases, offering those authorities our full cooperation in complementary actions within the competence of HELCOM and OSPAR.

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See the communication of the European Commission to the European Parliament and Council of Ministers "Towards a strategy to protect and conserve the marine environment" (COM (2002) 539 final).

- 17. The marine protected areas will be an important tool to protect the species and habitats identified as threatened, declining or in need of protection. We reaffirm our commitments to establish a network of well-managed marine protected areas. Based on the progress made by HELCOM in establishing a system of coastal and marine Baltic Sea Protected Areas, and OSPAR's agreement to a Recommendation and guidelines for selecting and managing an OSPAR Network of marine protected areas, working with the European Community, we shall have identified the first set of such areas by 2006, and shall then establish what gaps remain and complete by 2010 a joint network of well-managed marine protected areas that, together with the NATURA 2000 network, is ecologically coherent.
- 18. To this end, HELCOM and OSPAR have adopted a joint Work Programme to ensure that this work is done consistently across their maritime areas. They will also seek to cooperate with the Arctic Council and the Barcelona Convention in this work. In 2010, and periodically thereafter, we shall assess whether an ecologically coherent network of well managed marine protected areas has been achieved and maintained in both the North East Atlantic and the Baltic Sea.
- 19. Recognising that the release of genetically modified marine organisms presents an inherent threat of potentially severe, irreversible and transboundary effects, and the need to apply the precautionary principle, we agree to take all possible actions, in accordance with the requirements of the Directive 2001/18/EC and comparable national legislation, to ensure that the culture of genetically modified marine organisms is confined to secure, self-contained, land-based facilities in order to prevent their release to the marine environment.

Environmental impact of fisheries

- 20. The environmental impact of fisheries gives us special concerns about the conservation of biological diversity, habitats and species and emphasises the need for fisheries to be better managed, including through better integration of fisheries and environment policies.
- 21. The status of fish stocks in the North-East Atlantic and the Baltic Sea varies greatly. A high proportion of commercial fish stocks are already, or are being harvested in a way which will put them, outside "safe biological limits". Some fish stocks and species have been extirpated in some areas. Where scientific advice has been followed and long-term management plans have been applied in accordance with the precautionary approach, the status of the stocks has improved significantly. The current intensity of commercial fishery has put under pressure the marine ecosystems of much of the North-East Atlantic and of the Baltic Sea, and has changed the species composition and the population composition of the main target species. Some nontarget species and parts of the physical environment are also affected by excessive fishing pressure. This has affected some populations, some habitats and biodiversity, and may affect the productivity of marine ecosystems.¹⁰
- 22. The policy objectives for fisheries, for nature conservation and for the protection of the marine environment are complementary. Their integration is an on-going process, which should be intensified for each others' benefit. In this field, as in others, we stress the importance of cooperation among governments and relevant international bodies across all the issues related to the management of human activities affecting the maritime areas and to the conservation and protection of the marine environment, in order to ensure an integrated, holistic approach. We shall ensure that HELCOM and OSPAR work to promote such cooperation.
- 23. Where assessments of the quality of the marine environment in future demonstrate problems relating to questions of fisheries management, HELCOM and OSPAR will continue to draw their concerns to the attention of the competent national authorities and international bodies, offering those authorities their full cooperation in complementary actions within the competence of HELCOM and OSPAR.
- 24. Cooperation would be particularly beneficial in the areas of:
 - a. promotion of research aiming at the definition of undisturbed areas;

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All this is documented in the HELCOM 4th Periodic Assessment "Environment of the Baltic Sea Area 1994-1998", the OSPAR Quality Status Report 2000 on the North East Atlantic, the EC Green Paper on the Future of the Common Fisheries Policy (COM(2001) 135 final), the Baltic Marine Environment 1999-2002, and the 2003 report "Environmental Status of the European Seas" prepared by the International Council for the Exploration of the Sea.

- b. identification, protection and conservation of potentially vulnerable habitats, such as cold-water coral reefs:
- c. development of methods for assessing the environmental impact of fisheries and developments in fishing practices.
- 25. We welcome in general the movement of fisheries policy and management towards incorporating ecosystem considerations within a holistic, multi-annual and strategic context. The aims and methods of this movement were well captured by the Reykjavik Declaration of October 2001 on Responsible Fisheries in the Marine Ecosystem.
- 26. We also note with satisfaction the outcome of the reform of the EU Common Fisheries Policy, as a significant first step towards integrating an ecosystem approach into that policy.
- 27. Aquaculture makes an important contribution to the nutrition and the economic and social well-being of communities in both the HELCOM and OSPAR Convention areas. It is still developing as a sector of the food industry. We shall ensure, however, that the potential impacts of aquaculture on the environment are minimised.

Environmental impact of shipping

- 28. Recent disasters have emphasised how significant the environmental impact of shipping can be. This is another field which will benefit from a more integrated approach.
- 29. Much recent effort has gone into reinforcing measures aimed at strong and uniform safeguards for the environment against the large and increasing movements of cargo, which are so important to our economies. Action has been taken, and is under way, in the International Maritime Organization (IMO) and the UN Environment Programme at global level, within the European Union and at the regional level. We must now match this effort with intensified implementation and enforcement of these measures. We shall therefore work together on these different levels, within the framework of the UN Convention on the Law of the Sea, to ensure that all the controls that we have agreed, and are developing, are applied effectively. We shall focus our efforts on the significant risks, drawing on assessments of the environmental impact and threats from shipping for the marine ecosystems, including the assessments of HELCOM and OSPAR.
- 30. In particular, we welcome:
 - a. the adoption of an EC Regulation for limiting the use of single-hulled oil tankers and, in particular, for moving towards banning their use for carrying the heaviest grades of oil, and the proposal to IMO to amend MARPOL 1973/78¹¹ for this purpose;
 - the measures adopted by the EU Council of Ministers on 6 December 2002 and 27 March 2003;
 - c. the European Commission's proposals for measures on ship-source pollution;
 - d. the progress towards the adoption of the International Convention on Ballast Water Management, as an important means to control the unintentional introduction of non-native species;
 - e. the progress towards the finalisation and adoption of the draft International Convention on Wreck Removal;
 - f. the designation of the Wadden Sea as a particularly sensitive sea area (PSSA);
 - g. the examination within the framework of the IMO of the proposal from France (on behalf of itself, Belgium, Ireland Portugal, Spain and the United Kingdom and with the broad support of the European Union) that large areas of the Atlantic off the coasts of those States should be declared a PSSA (Western European PSSA);
 - h. the investigation by Norway of the possibility that parts of the Barents Sea along the Norwegian coast should be declared a PSSA;
 - i. the "clean ship concept".

The International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 (MARPOL 73/78).

31. To build further on this recent effort:

- we support the development of measures within the IMO to amend MARPOL 1973/78 to limit the use of single-hulled oil tankers and, in particular, ban their use for carrying the heaviest grades of oil;
- b. we shall make efforts to achieve the early entry into force of the International Convention on Ballast Water Management, and shall take steps to prepare for its speedy implementation within our regions;
- c. we support the initiatives taken within the IMO to enhance compensation including the new supplementary fund for the benefit of victims of oil pollution and the revision process in IOPC to improve the 1992 Fund Convention and the 1992 CLC Convention. We shall seek entry into force as soon as possible of:
 - i. the 1996 International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea (HNS);
 - ii. the 2001 International Convention on Civil Liability for Bunker Oil Pollution Damage;
 - iii. the Protocol of 2003 to the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (The Supplementary Fund);

we shall also consider the progress made generally on accountability and liability for the economic, environmental and social impacts of marine disasters, with a view to exploring further solutions if adequate progress is not being made;

- we join the efforts within IMO to quickly develop a flag-State code and a compulsory model audit scheme aimed at ensuring that flag States carry out their duties under international conventions;
- e. we also join the efforts in HELCOM, the European Union and IMO to consider establishing mandatory pilotage where requested by relevant coastal States in narrow or restricted waters:
- f. we support the declaration of PSSAs, and the adoption of appropriate associated measures, through the IMO machinery and in accordance with the UN Convention on the Law of the Sea, to enhance the protection of such areas;
- g. we also support efforts, through the IMO and other international and non-governmental organisations, to improve the training, certification and awareness of ships' officers and crew, particularly in order to ensure that they are able to make full use of the information made available by coastal states on navigational developments that may create hazards for ship safety or the marine environment;
- h. we urge the signatories of the Paris Memorandum on Port State Control to give effect to the call from the EU Council of Ministers for improved ship inspection, and to consider what further action would be appropriate to address the problems of ships, and of fleets whose members, are persistently found to be in breach of international rules and standards established to safeguard the safety of life at sea and the protection of the marine environment;
- i. we urge all Contracting Parties to ratify as soon as possible the International Convention on The Control of Harmful Anti-Fouling Systems on Ships. We also support the initiative of the Fifth North Sea Conference to develop by 2004 a North Sea strategy for the further reduction of the harmful effects of anti-fouling systems based on substances other than organotin. We will investigate the possibilities of expanding the strategy to the Baltic Sea and to other OSPAR regions.
- 32. We recognise that in a number of fields, including the implementation of regional measures in accordance with the IMO guidelines on ballast water, the designation of particularly sensitive sea areas and the control of air pollution from shipping, there will be common interests between HELCOM and OSPAR. We shall therefore ensure appropriate arrangements for joint efforts by HELCOM and OSPAR to enable such common interests to be promoted effectively.
- 33. Those of us who work within the framework of HELCOM also agree the measures and conclusions set out in the *HELCOM Ministerial Declaration*, in order to address problems specific to the special circumstances of the Baltic Sea Area.

Achieving our aims

- 34. Conserving our oceans and seas is crucial for present and future generations. Over the past three decades, HELCOM and OSPAR have made significant progress in helping to achieve cleaner seas and better protection of the marine environment. But much remains to be done, particularly in improving integration both between international forums and within national administrations. The developments in hand, particularly in relation to the European Marine Strategy, have the potential to meet these needs. We shall work to turn this potential into reality.
- 35. We shall hold a further joint meeting of HELCOM and OSPAR at Ministerial level in 2010 to take stock of developments and review the need for new initiatives.

Annex 3

Statement on the Ecosystem Approach to the Management of Human Activities

"TOWARDS AN ECOSYSTEM APPROACH TO THE MANAGEMENT OF HUMAN ACTIVITIES"

The Baltic Marine Environment Protection Commission (the Helsinki Commission – HELCOM) and the OSPAR Commission for the Protection of the Marine Environment of the North East Atlantic (OSPAR) jointly adopt this statement of their common vision of an ecosystem approach to managing human activities impacting on the marine environment (an "ecosystem approach") in their maritime areas:

The foundation of an ecosystem approach

- 1. The North-East Atlantic and its adjacent seas, as well as the Baltic Sea, are part of the world's oceans. In assessing and conserving them, restoring them where practicable, and managing our activities in them, we must apply the principles that the international community has adopted for the world's oceans and seas.
- 2. The oceans and seas constitute the major part of the planet that supports life, and drive the climate and the hydrological cycle. It is crucial to conserve marine biological diversity and its intrinsic value for maintaining life on earth in order to help provide the vital resources for sustainable use to ensure well-being for present and future generations and economic prosperity, to help eradicate poverty, and to help ensure food security.
- 3. The marine environment is both an ecosystem and an interlocking network of ecosystems. The Convention on Biological Diversity defines an ecosystem as "a dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit". No particular spatial unit of scale is included in this definition. The scale of analysis and action is to be determined by the problem being addressed.
- 4. All the components of an ecosystem, including the human component, function together and interact to form an integrated network. Ensuring the integrity of the ecosystems, thereby restoring when practicable and/or maintaining their characteristic structure and functioning, productivity and biological diversity, requires a long-term integrated management of human activities, explicitly:
 - a. managing human activities in order to respect the capacity of ecosystems to fulfil human needs sustainably;
 - b. recognising the values of ecosystems, both in their continuing unimpaired functioning and specifically in meeting those human needs;
 - c. preserving or increasing their capacity to produce the desired benefits in the future.
- 5. The ecosystem approach can therefore be defined as "the comprehensive integrated management of human activities based on the best available scientific knowledge about the ecosystem and its dynamics, in order to identify and take action on influences which are critical to the health of marine ecosystems, thereby achieving sustainable use of ecosystem goods and services and maintenance of ecosystem integrity". The application of the precautionary principle is equally a central part of the ecosystem approach¹².

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It is understood that, in the context of the management of fisheries, the "application of the precautionary principle" has the same result as the application of the precautionary approach as referred to in, for example Article 6 of the 1995 UN Fish Stocks Agreement.

Global principles

- 6. The international community has progressively agreed on principles to ensure the conservation and sustainable use of the world's oceans and seas, including:
 - the United Nations Convention on the Law of the Sea (UNCLOS), which sets out the overall legal framework within which all activities in this field must be considered;
 - Chapter 17 of Agenda 21, adopted in 1992, which remains the fundamental programme of action for achieving sustainable development in respect to oceans and seas;
 - c. the 1995 Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities;
 - d. the 1995 UN Fish Stocks Agreement¹³, and the FAO Code of Conduct for Responsible Fisheries;
 - e. the 1992 Convention on Biological Diversity and Decisions II/10 (conservation and sustainable use of marine and coastal biological diversity) and V/6 (ecosystem approach) taken under it, which set out vital aims, principles and operational guidance for an equitable and integrated approach to conservation and sustainable use of the marine and coastal environment;
 - f. the commitments made in 2002 at the World Summit on Sustainable Development which highlight the issues on which action is most urgently needed, including in particular:
 - i. encouraging the application by 2010 of the ecosystem approach;
 - ii. maintaining or restoring fish stocks to levels that can produce the maximum sustainable yield, with the aim of achieving these goals for depleted stocks on an urgent basis and where possible not later than 2015;
 - iii. putting into effect the FAO international plans of action, in particular the International Plan of Action for the Management of Fishing Capacity by 2005 and the International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing by 2004;
 - iv. establishing effective monitoring, reporting and enforcement, and control of fishing vessels to further the International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing;
 - v. eliminating subsidies that contribute to illegal, unreported and unregulated fishing and to over-capacity, while completing the efforts undertaken at the World Trade Organization to clarify and improve its disciplines on fisheries subsidies:
 - vi. establishment of marine protected areas consistent with international law and based on scientific information, including representative networks by 2012;
 - vii. establishing a regular process under the United Nations for global reporting and assessment of the state of the marine environment, including socio-economic aspects, both current and foreseeable, building on existing regional assessment;
 - viii. promoting sustainable patterns of production and consumption, applying *inter alia* the polluter-pays principle;
 - ix. supporting sustainable development of aquaculture.

The HELCOM and OSPAR frameworks

7. All States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit the marine resources available to them in accordance with the UN Convention on the Law of the Sea pursuant to their own environmental

The United Nations Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks.

policies, and 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.

- 8. The HELCOM and OSPAR Conventions are major instruments through which a proper balance of these rights and responsibilities is achieved for the North East Atlantic and the Baltic Sea Area. Within the overall framework created by those Conventions, particular significance attaches to:
 - a. the general obligation, in accordance with the provisions of the Conventions, to take all possible steps to prevent and eliminate pollution and to take the necessary measures to protect the maritime area against the adverse effects of human activities so as to safeguard human health and to conserve marine ecosystems, including natural habitats and biodiversity and to restore marine areas which have been adversely affected;
 - b. the acceptance of the precautionary principle and the polluter-pays principle;
 - c. the use of best available techniques and best environmental practice, including, where appropriate, clean technology;
 - d. the emphasis on monitoring and assessing inputs of nutrients and hazardous substances and all compartments of the marine environment (water, sediments and biota) and on developing priorities for action for their conservation and sustainable use;
 - e. the development of programmes and measures, in accordance with the provisions of the Conventions:
 - i. to combat pollution from all sources; and
 - ii. to address adverse impacts from human activities in the light of their extent, intensity, duration, actual and potential adverse effects on species communities, habitats and ecological processes, and the irreversibility or durability of these effects, subject (in the case of OSPAR) to a prohibition on adopting programmes and measures on questions relating to the management of fisheries.
- 9. All HELCOM and OSPAR Contracting Parties have further commitments to promoting environmental and nature protection and sustainable use and development.
- 10. Particular commitments for the Contracting Parties concerned arise from the decisions of North Sea Ministers in the framework of the International Conferences on the Protection of the North Sea. Within this framework, the global principles have been interpreted for application at a regional level, through the commitment by Ministers in 1997 to an ecosystem approach to the management of fisheries and other activities¹⁴ and the commitment by Ministers in 2002 to a conceptual framework for an ecosystem approach¹⁵.

Applying the ecosystem approach in the HELCOM and OSPAR frameworks

- 11. Only by considering together the ecosystem structures, processes, functions and interactions relevant to the development of policies on the different issues arising in the North East Atlantic and the Baltic Sea Area can management measures be developed that will ensure the sustainable use of the Atlantic ocean and its adjoining seas, and the balance of the interests of different sectors.
- 12. Therefore, in the light of the future development of the European Marine Strategy, of the relevant EC directives and of measures adopted by other international organisations, HELCOM and OSPAR will aim to develop the existing systems and further establish for their spheres of competence:

Ministerial Declaration of the Fifth International Conference on the Protection of the North Sea, Bergen, Norway, March 2002 – paragraph 2 and Annex 2.

Statement of conclusions of the Intermediate Ministerial Meeting on the Integration of Fisheries and Environmental Issues, Bergen, Norway 1997 – paragraph 2.6.

- a. by 2005, a concept and methodology for determining the full range of measures which are necessary to implement consistently an ecosystem approach to the management of human activities in the marine environment;
- b. by 2010, a full set of management measures that are consistent with an ecosystem approach.
- 13. HELCOM and OSPAR will encourage all other authorities whose management actions impact upon the North East Atlantic and the Baltic Sea Area to do the same. In this context and in addition to the global principles set out in §6 above, they draw the attention of the national authorities and international bodies competent for fisheries management to the following elements for further consideration:
 - further development of sound, widely accepted scientific advice on fisheries and the marine environment, especially through the International Council for the Exploration of the Sea, based on research into the structure and functioning of marine ecosystems and giving special attention to research on undisturbed areas;
 - further improvement of the management of deep-water fisheries, in line with scientific advice and following the precautionary approach, in order to protect relevant fish stocks and contribute to the protection and conservation of deep sea vulnerable habitats, such as sponge aggregations, cold-water coral reefs, seamounts, and carbonate mounds;
 - minimising by-catch of species which are not the intended object of commercial fishing and to avoid damage to sensitive habitats in other areas. Such action is needed to protect the species and habitats identified by the HELCOM and OSPAR Commissions as in need of protection;
 - d. cooperation between fisheries authorities and nature-protection authorities in resolving issues on marine species, especially those listed in the EC Habitats Directive, which lie on the boundaries between fisheries and nature-protection policies and in particular develop, and promote the implementation of, recovery plans for harbour porpoises in the Baltic Sea and the North Sea;
 - development of eco-labelling schemes as means of promoting sustainable fishing practices and providing objective and verifiable information to the consumer, while ensuring that their certification methods are equitable, transparent, scientificallybased and fully accessible to the fishing industry;
 - f. proper management of all forms of mariculture, aquaculture of marine species and marine artificial stocking programmes.
- 14. At the same time, HELCOM and OSPAR will pursue the implementation of their agreed strategies, so as to provide management measures consistent with an ecosystem approach. In doing so, the aim will be to work coherently towards a holistic approach to the problems addressed by the strategies.
- 15. HELCOM and OSPAR will focus on four elements in particular:
 - a. promoting understanding and acceptance by all stakeholders of the ecosystem approach to the management of human activities, and collaboration among the various management authorities in the North East Atlantic and in the Baltic Sea Area in implementing that approach;
 - b. monitoring the ecosystems of the marine environment, in order to understand and assess the interactions between and among the different species and populations of biota, the non-living environment and humans;
 - c. setting objectives for environmental quality, underpinned by monitoring, in support both of the formulation of policy and of assessments;
 - d. assessing the impact of human activities upon biota and humans, both directly and indirectly through impacts on the non-living environment, together with the effects on the non-living environment itself.

Understanding and acceptance

- 16. To achieve understanding and acceptance by stakeholders of the ecosystem approach to management will require action both by HELCOM and OSPAR collectively and by the individual Contracting Parties:
 - a. HELCOM and OSPAR will need to ensure that stakeholder representatives can play an effective role in developing and applying the ecosystem approach within HELCOM and OSPAR. This will require more attention to presenting the issues being studied within the HELCOM and OSPAR frameworks in ways which are more readily understood by the representatives of the various stakeholders. Only in this way can transparency and, consequently, understanding be achieved. This is particularly important for proper assessments of the marine environment, required as a basis for all policy decisions;
 - HELCOM and OSPAR will need to work with the other management authorities to develop better systems of collaboration, including systems for developing the framework to establish the full range of management measures necessary for implementing the ecosystem approach;
 - c. the Contracting Parties will need to ensure that they involve stakeholders in the development of their national thinking on the stewardship of the oceans and seas, and make clear the relevance of what is being done within the HELCOM and OSPAR frameworks.

Monitoring and assessing ecosystems

- 17. HELCOM and OSPAR have obligations to measure and monitor the quality of the marine environment and its compartments (water, sediments, and biota), the activities and inputs that can affect that quality and the effects of those activities and inputs, and to assess what is happening in the marine environment as a basis for identifying priorities for action.
- 18. Therefore HELCOM, for its part, will continue with collecting the necessary information and developing and producing indicator reports, thematic assessments of specific issues and periodic general assessments of the whole of the marine environment of the Baltic Sea Area as a basis for the policy decisions on managing the human activities that impact on ecosystems.
- 19. OSPAR, for its part, will continue with collecting the necessary information and producing thematic assessments of specific issues and periodic general assessments of the whole of the marine environment of the North East Atlantic, as a basis for the policy decisions on managing the human activities that impact on ecosystems.
- 20. In doing this, HELCOM and OSPAR will continue to deploy the best available scientific and technical knowledge to achieve integrated assessments.

Setting objectives

- 21. In order to provide a robust framework for assessment and policy formulation, HELCOM and OSPAR will pursue the setting of objectives for environmental quality.
- 22. In particular, for its part, HELCOM will pursue a pilot project in the Baltic Sea Area for identifying environmental quality issues and the specific elements against which they can be measured, and for developing ecological quality objectives for each of those elements.
- 23. For its part, OSPAR will:
 - a. pursue the pilot project on ecological quality objectives for the North Sea and further identify environmental quality issues and the specific elements against which they can be measured, and further develop ecological quality objectives for each of those elements;
 - b. in the light of that pilot project, decide how to evaluate environmental quality against clear ecological quality objectives, both as a long-term system for the North Sea and in other OSPAR regions.

Managing human activities

- 24. On the basis of the knowledge gained from the assessments produced, HELCOM and OSPAR will continue to act on policy issues already identified, and identify and act on newly-emerging issues where human activities impact directly or indirectly on the biota and threaten to undermine the health, productivity and biological diversity of the ecosystems or damage valuable features of the non-living environment itself. In particular:
 - a. they will pursue their strategies to combat eutrophication, and pollution from hazardous substances and radioactive substances and the OSPAR Strategy on Environmental Goals and Management Mechanisms for Offshore Activities, with the aim of providing for a chemical, physical and biological environment in the North East Atlantic and the Baltic Sea Area consistent with a high level of protection for the critical features of its ecosystems and protection of the food web;
 - b. where measures to prevent, reduce or control inputs of hazardous substances, nutrients or radioactive substances appear to be required, and the European Union or some other international forum can be clearly identified as more appropriate and more efficient, they will draw the attention of that forum to such a need;
 - c. they will pursue their strategies on the protection and conservation of ecosystems and biological diversity, with the aim of identifying and controlling human activities which so affect the non-living environment and impact on biota as threaten the health, productivity and biological diversity of the ecosystems. Where appropriate, this includes promoting cooperation in spatial planning between competent authorities, especially in the development of spatial planning tools for the maritime areas:
 - d. they will address, if necessary, threats to the health, productivity and biological diversity of ecosystems in respect of:
 - species or habitats which have been identified as threatened, declining or in need of protection; or
 - ii. marine protected areas;
 - e. they will draw to the attention of the authorities responsible for questions of fisheries management any issues highlighted by assessments of interactions between and among biota and humans which could justify intervention by those authorities.
- 25. On the basis of the knowledge gained from the assessments produced and other studies, HELCOM and OSPAR will also continue to act on policy issues already identified, and identify and act on newly-emerging issues, where human activities otherwise threaten to damage the marine environment.
- 26. In particular, HELCOM, for its part, will:
 - continue to monitor and assess the environmental impacts of shipping and, when appropriate, initiate joint actions within the International Maritime Organization, within other international organisations and/or within HELCOM as well as continue to ensure effective and harmonised implementation of already adopted rules;
 - continue to ensure adequate abilities to respond to marine incidents and reduce the number of illegal deliberate discharges of oil, through the standing operational network established under HELCOM, and with the aim of further improving regional cooperation;
 - c. assess the environmental impacts caused by fisheries, and, when appropriate initiate joint actions with the competent authorities for the management of fisheries, especially with International Baltic Sea Fisheries Commission.
- 27. In particular, OSPAR, for its part, will:
 - consider the impact, including the cumulative and combined impacts, of different types of human activities other than pollution on the marine environment and, where appropriate, take action under its Strategy on the Protection and Conservation of the Ecosystems and Biological Diversity of the Maritime Area;
 - b. consider the extent of the adverse impact of shipping and, where appropriate, take initiatives to ensure consideration of the issue by the International Maritime

- Organization or take regional initiatives, especially under agreements established by the International Maritime Organization; or
- draw to the attention of the authorities responsible for questions of maritime transport and navigation any issues concerning maritime safety, the prevention, reduction and control of marine pollution from ships and other matters concerning the effect of shipping on the maritime environment;
- d. maintain close liaison with the Helsinki Commission, the Bonn Agreement for Cooperation in Dealing with Pollution of the North Sea by Oil and other Harmful Substances and the North East Atlantic Agreement for Cooperation in the Protection of Coasts and Waters against Pollution due to Hydrocarbons or Other Harmful Substances (Lisbon Agreement), in order to ensure that illegal discharges of oil from ships and marine pollution emergencies are prevented and their adverse impacts mitigated.

Feedback and review

- 28. Through their assessment and monitoring programmes, HELCOM and OSPAR will continue to contribute to the improvement of scientific understanding of the marine environment processes, and on this basis will keep the implementation of their strategies and the pursuit of ecological quality objectives under periodic review in order to improve and up-date them and to determine the need for further measures to protect the marine environment.
- 29. In particular, this statement will be reviewed in the light of developments.

Annex 4

Statement on the European Marine Strategy

"WHAT HELCOM AND OSPAR CAN BRING TO THE DEVELOPMENT OF THE EUROPEAN MARINE STRATEGY"

The Baltic Marine Environment Protection Commission (the Helsinki Commission – HELCOM) and the OSPAR Commission for the Protection of the Marine Environment of the North East Atlantic (OSPAR) jointly adopt the following statement to set out the contribution that they can make to the development and implementation of the European Marine Strategy:

General

1. HELCOM and OSPAR will undertake, respectively, the actions identified below for the Baltic Sea Area and the North East Atlantic, but in collaboration with each other and with the other relevant international bodies. The enlargement of the European Union will mean that EC measures will be applicable across very large parts of the HELCOM and OSPAR maritime areas and their catchments. There must be an inclusive consultation on the development of the European Marine Strategy, and the final arrangements for cooperation and the eventual commitments by the various governments and organisations concerned will depend on this consultation.

Assessment and Monitoring

- 2. Scientific understanding of the marine environment must be the basis of all policy, programmes and measures to conserve and protect it. The Helsinki and OSPAR Conventions accordingly create obligations on monitoring and assessing the marine environment, and HELCOM and OSPAR have adopted strategies and programmes to meet these obligations.
- 3. Collection, analysis, reporting and assessment of data is undertaken within many overlapping frameworks. Each of these frameworks has its own objectives, and it is often difficult to avoid overlapping data collection and reporting. Nevertheless, efforts are under way within the European Environment Agency, the European Union and the European Economic Area to establish systems to minimise any such overlaps.
- 4. HELCOM and OSPAR will pursue their obligations to monitor and assess the status of the marine environment, with the objective of publishing assessments both of specific themes and periodically of the status of the marine environments of the Baltic Sea Area and the North East Atlantic, as a whole. As part of this work, HELCOM and OSPAR will include assessments of the impact of climate change and climate variability on the oceanography and ecosystems of the North East Atlantic and the Baltic Sea Area, in order to contribute to the knowledge base for judgements on policy in this field. They will also aim to reach agreements to ensure that collecting and reporting information on the marine environment can be carried out by single processes, and that the resulting information is then shared between the relevant bodies.
- 5. Based on their work on their maritime areas, HELCOM and OSPAR will also contribute to the new system for the Global Assessment of the State of the Marine Environment, being established under the auspices of the United Nations.

Conservation of biological diversity and habitats

6. Excessive fishing and pollution, the introduction of non-indigenous species, disturbance from new uses of the sea and seabed and other adverse impact of human activities have seriously undermined the sustainability of many ecosystems in the Baltic Sea Area and in many parts of the North East Atlantic. In particular, populations of fish and marine mammals have been eliminated or threatened in several areas and habitats that are crucial for many species have been degraded. HELCOM and OSPAR have adopted long-term strategies to guide their work in this field, and these strategies will be an important contribution to the overall European Marine Strategy, both on the conservation of marine biological diversity and in managing human activities that may adversely affect the marine environment.

- 7. The European Community has adopted directives for the conservation and protection of birds and habitats ¹⁶ ("the EC Birds and Habitats Directives"), which apply also to the sea areas under the jurisdiction of its Member States. The resulting NATURA 2000 network (the finalisation of which becomes urgent) and the associated actions and measures will be very important for conserving marine biological diversity and ecosystems. The international fisheries commissions, the European Community and the other fisheries management authorities have duties in managing fisheries to ensure the conservation of biological diversity from the impact of fisheries. The international organisations concerned with marine mammals ¹⁷ also have duties in this field.
- 8. In pursuance of their duties under the Conventions to prevent and eliminate pollution and to protect the marine environment against the adverse effects of human activities so as to safeguard human health and conserve marine ecosystems, HELCOM and OSPAR will:
 - a. identify the issues that need to be addressed in order to achieve a coherent and consistent approach to the conservation of biological diversity throughout the Baltic Sea Area and the North East Atlantic. They will therefore continue to identify species and habitats which are threatened and/or declining or in need of protection, to assess which human activities adversely impact on biological diversity or particular species or habitats, and to expand an ecologically coherent network of well managed marine protected areas throughout the Baltic Sea Area and the North East Atlantic, consistent with the Natura 2000 network;
 - b. where action is desirable in relation to a question relating to the management of fisheries, take steps in accordance with the provisions of the Helsinki or OSPAR Conventions, as appropriate;
 - c. identify how to take forward and broaden the approach of the EC Birds and Habitats Directives in order to ensure the conservation of the full range of habitats and species in the marine environment within the jurisdiction of the EU Member States in accordance with the objectives of those directives, and suggest to the European Commission initiatives for these purposes;
 - d. consider in addition how to promote the conservation of the full range of species and habitats in all parts of the maritime areas of the two Commissions;
 - e. develop and implement other programmes and measures which may be needed to address the issues identified, where such issues are not addressed by action in other forums.

Development in the landward coastal area

- 9. Human settlements along the coasts of the Baltic Sea Area and the North East Atlantic have profoundly affected the adjoining marine environment, not least by increasing pollution and the demands for limited resources. The intensification of such development, including the growth of the tourist industry, will further impact on the marine environment, particularly where it results in changes in, or intensification of, the use of the sea for shipping, recreation or mariculture.
- 10. The European Conference of Ministers of Regional Planning in 2000 adopted a set of Guiding Principles for the Sustainable Spatial Development of the European Continent. For the European Union, these are underpinned by the European Spatial Development Perspective, adopted in 1999 at Potsdam, Germany, by the Ministers responsible for spatial planning. These provide overall frameworks for national planning. The integration of developments in the landward and seaward parts of the coastal zone is addressed by the EU Recommendation on Integrated Coastal Zone Management¹⁸, and parallel measures by other Contracting Parties.

Council Directive of 2 April 1979 on the conservation of wild birds (79/409/EEC) and Council Directive of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (92/43/EEC).

In particular, the International Whaling Commission, ASCOBANS (the Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas), ACCOBAMS (Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area), concluded in 1991 and 1996 respectively under the auspices of the Bonn Convention on Migratory Species, and the North Atlantic Marine Mammals Commission.

Recommendation of the European Parliament and of the Council of 30 May 2002 concerning the implementation of Integrated Coastal Zone Management in Europe (2002/413/EC).

The effects of significant developments on the environment are addressed, within the EU, by the EC Strategic Environmental Assessment Directive¹⁹ and the EC Environmental Impact Assessment Directive²⁰ and, in the transboundary context, by the Espoo Convention²¹. Taken together, these various instruments and measures provide an appropriate framework for the operation of well developed national systems for planning and development control.

11. HELCOM and OSPAR will therefore focus their attention in this field on the pressures from existing and new developments which need to be taken into account in the other programmes and measures that they are developing.

Development in, and use of, the maritime area

- 12. The development of the offshore oil and gas industry and the extraction of sand and aggregates from the seabed has required the creation of regulatory systems. Future developments in this field, not least the creation of offshore wind-energy installations, suggest that more collaboration between States will be needed.
- 13. The EC Strategic Environmental Assessment Directive and Environmental Impact Assessment Directive and the Espoo Convention already provide a framework for assessing the impact of major developments in the maritime area, but do not set out approaches which will ensure the application of consistent criteria to decision-making on such developments in the different jurisdictions. Although progress has been made in developing common approaches to the offshore oil and gas industry and the extraction of sand and aggregates, no common understanding exists on how to address many other activities.
- 14. HELCOM and OSPAR will, therefore, investigate how action could help more consistent and coherent decisions on developments in the maritime area, including uses that do not result in permanent installations. In this context, OSPAR has already taken an initiative to adopt Guidance on a Common Approach to dealing with Offshore Wind-Energy Farms, as a contribution to combating climate change and its impacts on the marine environment, by ensuring that such installations are developed in a coherent, environmentally sensitive and sustainable manner. Within their spheres of competence, HELCOM and OSPAR will develop any necessary programmes and measures and will draw the attention of other international bodies to any issues more appropriately addressed in those other forums.

Dumping and waste disposal in the seabed

- 15. In the past, dumping of waste in the sea represented a major threat to the maritime environment. The provisions of the original Helsinki and Oslo Conventions did much to control this, and the new regimes created by the 1992 Helsinki and OSPAR Conventions ensure the end of threats from such dumping in the Baltic Sea and the North East Atlantic.
- 16. HELCOM and OSPAR will pursue the implementation of the 1992 Helsinki and OSPAR Conventions, including, in the OSPAR maritime area, the ban on the dumping of vessels and aircraft which is not yet in force. They will also evaluate proposed new developments to ensure that the objectives of the Conventions continue to be achieved. The HELCOM and OSPAR Contracting Parties will also promote the speedy ratification and entry-into-force of the 1996 Protocol to the 1972 London Convention, in order to ensure the widest possible application around the world of the aims of the 1992 Helsinki and OSPAR Conventions.

Fisheries and their environmental impact

17. Many commercial fish stocks are being exploited beyond their safe biological limits, or are being exploited within that limit to an extent that risks the limit being breached. By-catch of juveniles of commercial species, the consequent high level of discards, and the mortality of, and damage to, non-target species, including benthic animals, marine mammals and sea-birds are continuing problems in many areas.

Directive of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment (2001/42/EC).

Council Directive of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment (85/337/EEC).

United Nations Economic Commission for Europe Convention on Environmental Impact Assessment in a Transboundary Context, Espoo, 25 February 1991.

- 18. It is the duty of the international fisheries commissions, the European Community and the national fisheries authorities to conserve all fisheries resources and, in doing so, to work towards fulfilling the obligations of their contracting parties under the UN Convention on the Law of the Sea and the Convention on Biological Diversity. The European Community and States outside the EU which are HELCOM or OSPAR Contracting Parties also have important responsibilities in ensuring that European vessels fishing in other jurisdictions and on the high seas act in accordance with the international agreements to which they are parties and with the FAO Code of Conduct for Responsible Fisheries. The European Marine Strategy must emphasise the importance of fulfilling all these duties.
- 19. HELCOM and OSPAR will continue to discharge their obligations to assess the environmental impact of fisheries, and will take action in accordance with the Helsinki and OSPAR Conventions where these assessments show that action is desirable in relation to questions of fisheries management, or where other action is needed to protect marine ecosystems and biological diversity. HELCOM and the International Baltic Sea Fisheries Commission will continue the cooperation in the protection and the sustainable utilisation of the marine living resources of the Baltic Sea. OSPAR will develop similar cooperation with the international fisheries commissions active in the North East Atlantic.

Land-based sources of pollution

Global Programme of Action

20. The HELCOM and OSPAR Contracting Parties are committed to the Global Programme of Action to Protect the Marine Environment from Land-Based Activities. They consider that the HELCOM and OSPAR strategies, together with their other international obligations, will fulfil their commitments under the Global Programme. In addition, they will support the work of the UN Environment Programme and the other UN agencies and bodies involved in the Global Programme in promoting the implementation of the Global Programme around the world, recognising that the strategies that they have developed could serve as models for other regions.

Hazardous Substances

- 21. Discharges of hazardous substances from land-based sources have been a significant cause of marine pollution. Both HELCOM and OSPAR have therefore adopted long-term strategies to move towards the cessation of discharges, emissions and losses of hazardous substances to the marine environment. The implementation of these strategies should be an important part of the overall European Marine Strategy.
- 22. At the global level, major progress has been made with the adoption of the 2001 Stockholm Convention on Persistent Organic Pollutants. HELCOM and OSPAR Contracting Parties can play an important role in bringing this Convention into force, and assisting in its implementation. Similar world-wide initiatives on other hazardous substances will also be important. The UN Economic Commission for Europe Convention on the Long-Range Transport of Air Pollution also has an important role in protecting European seas from inputs of hazardous substances.
- 23. Within the European Union and the European Economic Area, important regulatory arrangements have been put in place to deal with a wide range of sources of discharges, emissions and losses of hazardous substances:
 - a. the EC Integrated Pollution Prevention and Control Directive^{22,} which has created a framework of regulation for major point sources of hazardous substances, requiring the application of best available techniques. The directive also sets up effective mechanisms for the development of descriptions of best available techniques for the processes which it regulates;
 - b. the EC Water Framework Directive²³ which sets up a unified approach to protecting and improving the quality of inland, transitional (estuarial) and coastal waters, in particular providing for a progressive reduction of pollution from priority substances

Council Directive of 24 September 1996 concerning integrated pollution prevention and control (96/61/EC).

Directive of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy (2000/60/EC).

- and the cessation or phasing-out of discharges, emissions and losses of certain hazardous substances;
- c. likewise, EC Directives and Regulations on hazardous substances in water²⁴, pesticides²⁵, pharmaceuticals²⁶ and the marketing and use of other hazardous substances²⁷, which control diffuse sources of many hazardous substances;
- d. the EC National Emissions Ceilings Directive²⁸, which addresses emissions to the atmosphere.

HELCOM and OSPAR Contracting Parties outside the European Union and the European Economic Area likewise have, or are developing, far-reaching systems of similar controls.

- 24. The development of the proposed new EU Chemicals Policy and the further implementation and development of the directives on hazardous substances must increasingly provide a comprehensive system of controls to prevent and eliminate discharges, emissions and losses of hazardous substances that can reach the marine environment. These developments must also promote and facilitate substitution of hazardous substances with less hazardous, or preferably non-hazardous, alternatives or the development and use of alternative processes. It will be important for the HELCOM and OSPAR Contracting Parties that are Member States of the European Union and the European Economic Area to ensure that full account is taken of the need to protect the marine environment in the development of this policy.
- 25. In particular, the opportunity should be taken to pursue the objectives of the HELCOM and OSPAR strategies on hazardous substances through the Contracting Parties which are Member States of the European Union promoting, within the new EU Chemicals Policy, the incorporation by industry into their strategies of the development of clean production and clean products (sustainable production and consumption). This would include the promotion of "green chemistry", including:
 - a. the encouragement of the use and development of environmentally sound products and the development of less hazardous, or preferably non-hazardous, substances;
 - the employment of usages and practices during the manufacture, use and ultimate disposal of chemicals (whether as intermediates, products or residues), including waste handling and waste management, that reduce, or preferably avoid, the use of hazardous substances and that avoid losses of hazardous substances to the environment;
 - c. the provision of alternatives to the use of hazardous substances in processes other than the manufacture of hazardous substances.
- 26. With the growth of such measures, there is a correspondingly reduced need for comprehensive systems of HELCOM and OSPAR measures for the prevention, reduction, control and elimination of discharges, emissions and losses of specific hazardous substances. There remain, nevertheless, continuing needs for identifying the problems of the marine environment and reviewing whether adequate measures are in place, in order to achieve commitments to make every endeavour to move towards the target of the cessation of discharges, emissions and losses of hazardous substances by the year 2020.

Council Directive of 4 May 1976 on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community (76/464/EEC).

Council Directive of 15 July 1991 concerning the placing of plant-protection products on the market (91/414/EEC).

Council Directive of 28 September 1981 on the approximation of the laws of the Member States relating to veterinary medicinal products (81/851/EEC), Council Directive of 13 December 1990 extending the scope of Directive 81/851/EEC on the approximation of the laws of the Member States relating to veterinary medicinal products and laying down additional provisions for immunological veterinary medicinal products (90/677/EEC), and Council Regulation of 22 July 1993 laying down Community procedures for the authorisation and supervision of medicinal products for human and veterinary use and establishing a European Agency for the Evaluation of Medicinal Products (2309/93).

Council Directive of 27 July 1976 on the approximation of the laws, regulations and administrative provisions of the Member States relating to restrictions on the marketing and use of certain dangerous substances and preparations (76/769/EEC) and related directives.

Directive of the European Parliament and of the Council of 23 October 2001 on national emission ceilings for certain atmospheric pollutants (2001/81/EC).

- 27. HELCOM and OSPAR will accordingly continue to pursue this goal and:
 - continue to cooperate with each other and with the European Community to this end;
 - b. identify hazardous substances that may reach and affect the marine environment. In doing so, they will work to achieve synergy with the system for identifying priority substances and priority hazardous substances for action under the EC Water Framework Directive;
 - locate the sources of such hazardous substances and their pathways to, and fate
 in, the marine environment, quantify such sources, and assess the scale of the
 problems;
 - d. indicate possible solutions, with inter alia a view to the promotion of the principles of "green chemistry", that is, reducing, or preferably avoiding, the use of hazardous substances in all aspects of the production, use and disposal of chemical products;
 - e. draw the attention of the various regulatory systems to the assessments of the specific problems of hazardous substances for the marine environment and to the possible solutions identified. In this process, it will be important for the HELCOM and OSPAR Contracting Parties which are Member States of the European Union and the European Economic Area to ensure that the conclusions of HELCOM and OSPAR are taken into account in developing EC measures, particularly in the implementation of the EC Water Framework Directive, in the development of guidance on best available techniques for the EC Integrated Pollution Prevention and Control Directive, and in the development of other EC regulatory systems for chemicals:
 - f. develop a system to deliver a comprehensive and coherent assessment of progress towards the achievement of the Hazardous Substances Strategy including the 2020 cessation target; and
 - g. develop specific programmes and measures where these are needed and will not be delivered by action in other forums.

Microbiological and viral contamination

- 28. Microbiological and viral contamination of transitional (estuarial) and coastal waters can have serious impacts on human health and on economic activities such as tourism and shellfish fisheries. Little is known about the risks to marine mammals and seabirds and other impacts on marine ecosystems from human pathogens in the marine environment.
- 29. EC Directives on bathing waters and on shellfish waters have set up a framework for controlling impacts on human health from such sources, which is further buttressed by the EC Urban Waste Water Treatment Directive. The EC Water Framework Directive is also establishing a more comprehensive approach to maintaining the quality of inland waters, transitional (estuarial) waters and coastal waters. Annex IV (Sewage) of MARPOL 73/78 will enter into force on 27 September 2003, and HELCOM will continue to enforce its provisions to the strictest extent permitted in the enclosed Baltic Sea. In the parts of the North East Atlantic likely to be adversely affected, action will be taken to enforce the provisions, in order to reduce the impact of sewage from ships.
- 30. There is therefore no need for further specific action by HELCOM and OSPAR on the human health aspects of microbiological and viral contamination. As resources permit, HELCOM and OSPAR will consider possible impacts on wild fauna as part of their work on the conservation of biodiversity.

Nutrients

31. Enhanced inputs of nitrogen, phosphorus and other nutrients used in primary production processes can lead to eutrophication²⁹ and to consequent de-oxygenation events and widespread kills of biota, particularly in partly enclosed sea areas and in deeper waters below a

[&]quot;Eutrophication" means the enrichment of water by nutrients causing an accelerated growth of algae and higher forms of plant life to produce an undesirable disturbance to the balance of organisms present in the water and to the quality of the water concerned, and therefore refers to the undesirable effects resulting from anthropogenic enrichment by nutrients.

stratification divide. These enhanced inputs have resulted both from agricultural activities that did not pay sufficient attention to environmental consequences, from failure to treat urban and industrial waste-water and to control air emissions adequately, and from discharges and emissions from industry and vessels. Both HELCOM and OSPAR have therefore adopted measures and long-term strategies to combat eutrophication. The implementation of these strategies will be an important part of the overall European Marine Strategy.

- 32. Within the European Union and the European Economic Area, the EC Nitrates Directive and the EC Urban Waste-Water Treatment Directive are major steps towards the control of these problems. Through its requirements for assessment and classification of biological quality status and efforts to produce "good ecological status", the EC Water Framework Directive will also result in further steps to combat eutrophication in inland waters, transitional (estuarial) waters and coastal waters. The new Annex VI to MARPOL³⁰ dealing with air pollution from ships is also important in some areas.
- 33. Current work in HELCOM and OSPAR is focused on monitoring (including the development of a harmonised reporting system) and on identifying problem areas and potential problem areas with regard to eutrophication and the nutrient inputs that are causing, or may cause, problems. This will continue and would be assisted by work to ensure a common basis for HELCOM, OSPAR and EU classifications. Further action could involve both establishing targets in this field and addressing identified major sources. HELCOM and OSPAR will continue the development of ecological quality objectives for ecological quality elements likely to be affected by eutrophication. Further HELCOM action on nutrients will be developed by defining more specific targets aimed at delivering by 2005 the strategic goals set up in the 1988/1998 Ministerial Declarations. A eutrophication initiative is also being taken to address further the problems of oxygen depletion in the Baltic Sea. Further OSPAR action on sources of nutrients will be considered when the EC measures and other commitments in this field by Contracting Parties have been fully implemented.

Radioactive Substances³¹

- 34. Concerns have been expressed by states around the Baltic Sea and the North East Atlantic about the impacts on human health and the effects on marine biota from discharges, emissions and losses of radioactive substances to the sea, including possible accidental discharges, and about the effects of possible public reaction to such discharges, emissions and losses on other uses of the sea (such as fisheries and recreation).
- 35. OSPAR has adopted a long-term strategy to reduce discharges, emissions and losses of radioactive substances to levels where the additional concentrations in the marine environment above historic levels, resulting from such discharges, emissions and losses, are close to zero. The implementation of this strategy will be an important part of the overall European Marine Strategy. OSPAR has also adopted a number of decisions³² and recommendations, and ensures regular reporting on the application of best available techniques.
- 36. Within the regulatory framework established under the International Atomic Energy Agency, the recommendations of the International Commission on Radiological protection and the Euratom Treaty, national systems ensure proper protection of human health. There is a range of opinion among states around the North East Atlantic whether these systems also sufficiently guarantee effective protection of marine biota and other interests. This debate will be

The International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 (MARPOL 73/78).

France maintains the reservation communicated in March 2003 against the inclusion of objectives relating to radioactive substances in the proposed European Marine Strategy, since Chapter III of the Euratom Treaty does not provide the mechanisms necessary for the European Community to assist in the fulfilment of the commitments of the Sintra Statement and the OSPAR Radioactive Substances Strategy, and since confusion would be the only result of attempting to pursue those objectives both in OSPAR and in another forum.

OSPAR Decision 2000/1 on substantial reductions and elimination of discharges, emissions and losses of radioactive substances, with special emphasis on nuclear reprocessing, and OSPAR Decision 2001/1 on the review of authorisations for the discharges or releases of radioactive substances from nuclear reprocessing activities were not accepted by France and the United Kingdom (the only two Contracting Parties with operative nuclear reprocessing plants) and do not therefore bind them.

taken further as work is completed in global forums on the development of criteria for the protection of the environment against radioactivity.

- HELCOM will continue to monitor and assess the inputs of radioactive substances, to quantify the amounts in the Baltic Sea Area, and to assess their possible effects on the food web and the doses to human population.
- The OSPAR Strategy with regard to Radioactive Substances commits Contracting Parties to a programme of progressive and substantial reductions in discharges, emissions and losses of radioactive substances towards an ultimate aim of concentrations in the marine environment near background values for naturally occurring radioactive substances and close to zero for artificial radioactive substances, taking into account legitimate uses of the sea, technical feasibility and radiological impacts on man and biota. OSPAR Contracting Parties have developed national plans to work towards this objective within the agreed timeframe. OSPAR will continue to assess the implementation of these plans, including the application of best available techniques and the status of the North-East Atlantic marine environment, in order to judge progress in delivering the Strategy's objective. It will also continue to promote the development of environmental quality criteria. Furthermore it will, if necessary, consider further measures to assist in that aim. OSPAR will also continue to consider how to ensure that these national plans adopt a consistent approach to the non-nuclear industrial and other sectors whose activities result in inputs of radioactive substances to the marine environment.

Litter

- 39. Litter from coastal sources, recreational activities, vessels and offshore installations still causes harm to the environment, threatens safety and health and undermines the economies of coastal communities, as well as spoiling the public's enjoyment of the sea and its coasts.
- Within the European Union and the European Economic Area, the EC Waste Framework Directive³³ promotes the proper management of waste, so as to reduce escapes of waste into the marine environment. Similar measures apply in other Contracting Parties. Full implementation of Annex V (Garbage) of MARPOL 73/78, the EC Directive on port reception facilities³⁴ and the Baltic Strategy on Port Reception Facilities³⁵ will assist in addressing the problem of litter from vessels. HELCOM and OSPAR Contracting Parties will further attack this problem by ensuring adequate port reception facilities to enable ships to deliver their wastes ashore and through efficient enforcement of the requirements for garbage discharge in port.
- OSPAR will continue to monitor marine litter on beaches and use this information as a basis for assessing the success of these initiatives in tackling the problem of marine litter. Nevertheless, there will remain major problems of ensuring that the public realise the seriousness of the problems caused by litter, especially that scattered along the sea shore, and encouraging them to change their habits. To these ends, HELCOM and OSPAR will continue to promote partnerships to tackle the problems of land-based marine litter.

Minerals extraction

Oil and gas

- Offshore oil and gas installations in the North East Atlantic represent a major extractive industry with all the typically resulting potential problems - disturbance from exploration to locate extraction sites and the placement of installations and communicating pipelines and cables, potentially polluting discharges and emissions, and decommissioning. OSPAR has therefore adopted a long-term strategy to set environmental goals, and to establish management systems for the offshore oil and gas industry, in order to address these problems. The implementation of this strategy will be an important part of the overall European Marine Strategy.
- HELCOM has adopted a regulatory system for any discharges from offshore installations of waste water containing oil, chemicals and hazardous substances, as well as for air emissions

³³ Council Directive of 15 July 1975 on waste (75/442/EEC).

³⁴ Directive 2000/59/EC of the European Parliament and of the Council of 27 November 2000 on port reception facilities for ship-generated waste and cargo residues.

³⁵ Strategy for Port Reception Facilities for Ship-generated Wastes and Associated Issues (the Baltic Strategy).

and disposal of drilling mud residues. OSPAR programmes and measures have established regulatory regimes for discharges of oil, chemicals, drilling muds and produced water and for decommissioning. The EC Integrated Pollution Prevention and Control Directive deals with certain emissions from combustion on offshore installations.

- 44. Activity on offshore oil exploration in the Baltic Sea is expected to increase in the near future. HELCOM will, where necessary, develop uniform principles for oil extraction in the Baltic Sea.
- 45. OSPAR will complete the work in progress on the potential adverse impacts of exploration for offshore oil and gas, on the placement of structures, cables and pipelines for oil and gas exploitation, on environmental goals for the discharge of offshore chemicals and on discharges of produced water and radioactive substances, and will (where necessary) develop further programmes and measures. OSPAR will also keep under review the existing regulatory regimes.

Sand and aggregates

- 46. The increasing demand for sand and aggregates and the environmental consequences of extraction on land have led to increasing demands for sea-dredged sand and aggregates. There are potential problems with such extraction where conflicting with the protection of species and habitats, since it may lead to long-lasting damage and destruction of important habitats, with consequential harm to species identified as threatened and/or declining or in need of protection.
- 47. HELCOM has adopted a recommendation on guidelines concerning marine sediment extraction in the Baltic Sea Area, in order to prevent severe impacts on marine and coastal ecosystems. OSPAR has adopted an agreement which embodies guidelines developed by the International Council for the Exploration of the Sea (ICES) for the management of marine sediment extraction.
- 48. As part of their overall assessments of the status of the marine environment, HELCOM and OSPAR will assess developments in this field on the basis of information, respectively, collected by HELCOM and (in the case of OSPAR) reported to ICES, and will, if necessary in the light of those assessments, develop further programmes and measures.

Shipping and its environmental impact

- 49. Compared with other major modes of transport, maritime transportation is generally environmentally friendly, particularly where ships meet the "clean ship" concept which is to be further developed. Nevertheless, the results of the operation of sub-standard shipping, maritime disasters and deliberate operational discharges by ships can have severe consequences, both locally and on a wider scale. As shipping is international by nature, regulation will be more effective if applied universally. The HELCOM and OSPAR Contracting Parties will therefore continue to support the work of the International Maritime Organisation to achieve effective protection of the marine environment at a world-wide, international level.
- 50. HELCOM has adopted a series of measures to prevent pollution from ships in the special circumstances of the Baltic Sea Area.
- 51. HELCOM, the Bonn Agreement and North Sea States are committed to improving enforcement against marine pollution offences by vessels, and will involve other European States in the actions for this purpose as opportunity offers.
- 52. The Contracting Parties of HELCOM and OSPAR are committed to intensifying the measures to ensure that shipping is environmentally friendly, and will pursue this aim in the appropriate forums for the different measures. Within HELCOM and OSPAR appropriate arrangements for joint efforts will be made to deal with issues (including the implementation of the international rules on ballast water, the designation of particularly sensitive sea areas and the control of air pollution from shipping) where the two regions share common interests.
- 53. Effective response to maritime disasters, to contain, mitigate and make good the damage which they cause, will continue to be essential. This will be particularly important in the light of the vast increases in maritime transportation expected both in the Baltic Sea Area and the North East Atlantic, not least in the amount of oil.
- 54. HELCOM and the Bonn Agreement will continue to provide focuses in the Baltic Sea Area and the northern North East Atlantic for planning, preparation, training and cooperation in

response to maritime disasters. The OSPAR Contracting Parties concerned will make every effort to achieve the extension of the Bonn Agreement to cover the sea areas around, and to the north of, Ireland, and to bring the Lisbon Agreement into force to provide a focus for similar cooperation in the southern North-East Atlantic. HELCOM, the Bonn Agreement and OSPAR will examine what joint action can contribute to improvements in response to maritime disasters.

Support to other regional marine organisations

- 55. The world's oceans and seas share many problems, and action is required around the world at regional level to address them.
- 56. HELCOM and OSPAR will play their part in collaborating with regional marine organisations in other regions and, where appropriate, will cooperate on specific issues, particularly with, respectively, the Nairobi and Abidjan Conventions for the seas of East and West and Central Africa, as one contribution of their Contracting Parties to the development of partnerships in accordance with the commitments made at the 2002 World Summit on Sustainable Development.

Annex 5

Joint HELCOM/OSPAR Work Programme on Marine Protected Areas

The Baltic Marine Environment Protection Commission (the Helsinki Commission – HELCOM) and the OSPAR Commission for the Protection of the Marine Environment of the North East Atlantic (OSPAR) jointly adopt the following work programme on the creation of a network of marine protected areas:

- 1. The purpose of the work programme is to ensure that by 2010 there is an ecologically coherent network of well managed marine protected areas for the maritime areas of both HELCOM and OSPAR ("the network").
- 2. To these ends, HELCOM and OSPAR will:
 - a. develop co-ordinated approaches to
 - the compilation and evaluation of proposals for the components of HELCOM and OSPAR networks of marine protected areas, and
 - ii. identifying and addressing any gaps to be filled in order to achieve the network.

which reflect the needs for protection of species and habitats identified by HELCOM and OSPAR as threatened, declining or in need of protection;

- b. develop and implement a strategy for achieving dialogue with relevant stakeholders on the management and conservation of marine protected areas, using (where possible) existing national and international forums;
- c. in order to ensure the ecological coherence of the network, develop common theoretical and practical aspects of what would constitute an ecologically coherent network of marine protected areas;
- d. develop, by 2005, a common proposal, taking into account the work done by HELCOM and OSPAR as well as work by the European Community, for a programme aimed at enhancing the protection of species and habitats in European marine waters, in order to produce suggestions for consideration by the European Commission for amendments to the annexes to the Habitats and Birds Directives;
- consider how Baltic Sea Protected Areas and components of the OSPAR Network
 of marine protected areas in the waters under the jurisdiction of EU Member
 States, together with the Natura 2000 network, can constitute a coherent network
 of marine protected areas;
- f. by 2006, evaluate whether the Baltic Sea Protected Areas and the components of the OSPAR Network of marine protected areas that have been identified by that date are sufficient to constitute the joint network, and take steps to identify and fill any gaps that are identified;
- g. by 2010, evaluate whether the aim of establishing the network has been achieved, take steps to fill any shortfalls and to maintain and develop the network thereafter and periodically evaluate whether the aims of the network continue to be met;
- h. develop practical guidance for the application of HELCOM and OSPAR management guidelines, including appropriate means to enlist the help of other authorities which are competent for some necessary action, in order to achieve a common standard of good management across the network;
- develop guidance on, and make arrangements for, the assessment of how effectively the management of HELCOM and OSPAR marine protected areas is achieving the aims of protection;
- j. consider how to take into account other relevant HELCOM and OSPAR initiatives, such as that on the identification and compilation of lists of habitats and species in particular need of protection, and those on marine habitat classification and mapping;
- k. as appropriate, identify and assist where collaboration with other international forums (such as the Convention on Biological Diversity, and the Berne, Bonn and

- Ramsar Conventions) may be required, for the implementation and management of HELCOM and OSPAR marine protected areas;
- I. explore the possibilities for collaboration with the Barcelona Convention and the Bucharest Convention and in the framework of the Arctic Council in this field.
- 3. To facilitate this joint work, the relevant HELCOM nature conservation working group and the OSPAR intersessional correspondence group on marine protected areas may hold joint meetings, in accordance with arrangements agreed by HELCOM and OSPAR. Where possible, these groups will also work in cooperation with the European Commission and any relevant informal advisory groups that the European Commission establishes.

Annex 6

2003 Strategies of the OSPAR Commission for the Protection of the Marine Environment of the North-East Atlantic

RECALLING the Convention for the Protection of the Marine Environment of the North-East Atlantic, 1992 ("OSPAR Convention"), and in particular Article 2.1(a) in which Contracting Parties agree to take all possible steps to prevent and eliminate pollution and to take the necessary measures to protect the maritime area against adverse effects of human activities so as to safeguard human health and to conserve marine ecosystems and, when practicable, restore marine areas which have been adversely affected;

RECALLING Article 2(2) of the OSPAR Convention, in which Contracting Parties agree to apply the precautionary principle and the polluter pays principle;

BEARING IN MIND the statement on an ecosystem-based approach to the management of human activities, adopted by the Joint Ministerial Meeting of the Helsinki and OSPAR Commissions on 26 June 2003:

IN THE LIGHT OF the proposed development of a European Marine Strategy;

HAVING REVIEWED the OSPAR Strategy on the Protection and Conservation of the Ecosystems and Biological Diversity of the Maritime Area, the OSPAR Strategy to Combat Eutrophication, the OSPAR Strategy with regard to Hazardous Substances, the OSPAR Strategy on Environmental Goals and Management Mechanisms for Offshore Activities, and the OSPAR Strategy with regard to Radioactive Substances;

The Contracting Parties to the Convention for the Protection of the Marine Environment of the North-East Atlantic, REAFFIRM the objectives of these strategies and UP-DATE them as follows for the purposes of directing the future work of the Commission:

I - Biological Diversity and Ecosystems

1. Objective

1.1 In accordance with the general objective, the objective of the Commission with regard to the protection and conservation of the ecosystems and biological diversity of the maritime area is to protect and conserve the ecosystems and the biological diversity of the maritime area which are, or could be, affected as a result of human activities, and to restore, where practicable, marine areas which have been adversely affected, in accordance with the provisions of the Convention, including Annex V and Appendix 3.

2. Strategy

- 2.1 The Commission will further develop the programmes and measures needed for the protection and conservation of the ecosystems and biological diversity of the maritime area and, where practicable, for the restoration of maritime areas that have been adversely affected, taking into account the need to avoid duplication of work on the international level.
- 2.2 To this end the Commission will further assess which species³⁶ and habitats need to be protected and those human activities that are likely to have an actual or potential adverse effect on these species and habitats or on ecological processes. For this assessment the following actions shall be taken:
 - a. on the basis of criteria developed for the selection of such species, habitats and ecological processes, further compilation, to the extent necessary, of lists of species and habitats, including the development of lists of threatened and/or declining species and habitats, taking into account:

Wherever in this Strategy the term "species" is used, this includes, where appropriate, populations of such species.

- (i) inventories of species and habitats in the maritime area;
- (ii) relevant lists developed by other international forums;
- b. the completion of the pilot project for the North Sea on ecological quality objectives, involving the trial application of a set of agreed ecological quality objectives for a number of ecological quality issues³⁷ and related elements, together with the development of further ecological quality objectives for other ecological quality issues and ecologically quality elements;
- in the light of the pilot project, evaluation of environmental quality against clear ecological quality objectives, both as a long-term system for the North Sea and in other OSPAR regions;
- d. assessment, in accordance with the criteria of Appendix 3 of the 1992 OSPAR Convention, and in the light of work in other international forums, of the following candidate list of human activities:
 - (i) sand and gravel extraction;
 - (ii) dredging for navigational purposes, other than within harbours;
 - (iii) the exploration for oil, gas and solid minerals;
 - (iv) the placement of structures for the exploitation of oil and gas;
 - (v) the construction or placement of artificial islands, artificial reefs, installations and structures (including offshore wind-farms);
 - (vi) the placement of cables and pipelines. This assessment will include an assessment of the scope for action under other international laws;
 - (vii) the introduction of alien or genetically modified species, whether deliberately or unintentionally;
 - (viii) land reclamation;
- e. in addition, the Commission will examine specific issues relating to tourism and recreational activities which have been identified in the background document on tourism;
- f. collection and evaluation of relevant information concerning existing protection programmes for marine species and habitats and an inventory of marine areas which are already protected;
- g. assessment of marine areas which have been adversely affected, with a view to identifying areas for restoration where practicable.
- 2.3 Based on this, the Commission will, if necessary to meet the objective, continue to draw up programmes and measures in accordance with Annex V of the 1992 OSPAR Convention with a view to:
 - a. controlling the human activities that have an adverse impact on species and habitats that need to be protected or conserved; or
 - b. restoring, where practicable, marine areas which have been adversely affected.

Such programmes and measures could include guidance for the selection and the establishment of a system of specific areas and sites which need to be protected and the management of human activities in these areas and sites. Priority will be given to the drawing up of programmes and measures for the protection of marine species, habitats or ecological processes that appear to be under immediate threat or subject to rapid decline. In drawing up such programmes and measures, account will be taken of the need to develop integrated coastal zone management and to ensure the proper spatial planning of the maritime area.

- 2.4 The Commission will continue to assess, in accordance with Annex IV of the OSPAR Convention, the effects on ecosystems and biological diversity of:
 - a. human activities liable to produce pollution in the maritime area, with a view to taking action under Annexes I to III of the 1992 OSPAR Convention;

The ecological quality issues identified are: commercial fish species, threatened and declining species, seabirds, fish communities, benthic communities, plankton communities, habitats, nutrient budgets and production, and oxygen consumption.

b. human activities in relation to which programmes and measures cannot be adopted under the Convention, with a view to drawing the attention of the competent authorities to any questions on which action is desirable.

3. Interrelations with Other International Institutions

- 3.1 Within the framework of the European Marine Strategy, the Commission will seek to contribute through this work to the development of the NATURA 2000 network and the implementation of the European Community's Council Directive 92/43/EEC on the conservation of natural habitats and wild flora and fauna and the Council Directive 79/409/EEC on the conservation of birds.
- 3.2 To promote consistency, other relevant measures which have been agreed or are being negotiated by some or all Contracting Parties in other forums shall be taken into account in the light of their applicability to different geographical areas. Such measures are the measures taken under the Bern, Bonn (including its regional agreements) and Ramsar Conventions, the Convention on Biological Diversity, the Helsinki Convention, the Barcelona Convention, the Trilateral Wadden Sea Co-operation and the North Sea Conferences.
- 3.3 The Commission will collaborate with relevant scientific institutions including the International Council for the Exploration of the Seas and the European Environment Agency (EEA). In the case of the EEA, the development of the EUNIS classification will be particularly important, in order to develop a classification system of habitats which can be used by OSPAR for assessment, comparison and mapping.

4. Timeframe & Implementation

- 4.1 The further implementation of the strategy should start from the adoption in 2003 of:
 - a. the Texel-Faial criteria for the selection of threatened and declining species and habitats;
 - b. the OSPAR List of Threatened and Declining Species and Habitats;
 - c. the OSPAR Guidelines for the identification and selection of marine protected areas in the OSPAR marine area;
 - d. the OSPAR Guidelines for the Management of Marine Protected Areas in the OSPAR Maritime Area;
 - e. OSPAR Recommendation 2003/3 on a Network of Marine Protected Areas.
- 4.2 The implementation of the strategy will have two approaches: one addressed to protecting identified species, habitats and marine protected areas; the other addressed to the consideration of identified human activities.
- 4.3 Under the approach addressing identified species, habitats and marine protected areas:
 - assessments of the species and habitats identified in the OSPAR Lists of Threatened and Declining Species and Habitats will be carried out under the Joint Assessment and Monitoring Programme;
 - on the basis of those assessments, and in accordance with a timetable agreed on the basis of them, appropriate measures within the sphere of competence of OSPAR will be adopted for the protection of those species and habitats, or the attention of the competent authorities will be drawn to the need for such measures;
 - c. a network of marine protected areas will be identified on the basis of the Guidelines for the Identification and Selection of Marine Protected Areas in the OSPAR Maritime Area. The network may also include areas in the OSPAR maritime area which the Contracting Parties which are EU Member States are required to designate as Special Areas of Conservation or Specially Protected Areas under the EC Habitats and Birds Directives. By 2010, the areas forming part of this network will be formally designated and management plans will have been adopted for them.
- 4.4 In developing the OSPAR Network of Marine Protected Areas, the Commission will undertake the following actions to complement the actions of the Contracting Parties under the OSPAR Recommendation on a Network of Marine Protected Areas:

- a. arrange for the evaluation in 2004 and 2005 of the areas reported by Contracting Parties in the preceding year as components of the OSPAR Network of Marine Protected Areas ("the OSPAR Network"). This evaluation will be to see how far the purposes of the Recommendation on a Network of Marine Protected Areas have been achieved;
- b. evaluate in 2006 whether the components of the OSPAR Network that have been selected by that date will be sufficient to make that network an ecologically coherent network of marine protected areas for the maritime area;
- c. if so requested by a Contracting Party concerned, consider whether any action by the Commission, or concerted action by the Contracting Parties, is needed to support efforts by Contracting Parties to achieve the institution of management measures by an international organisation for any component of the OSPAR Network;
- d. consider reports and assessments from Contracting Parties and observers on possible components of the OSPAR network and on the need for protection of the biodiversity and ecosystems in the maritime area outside the jurisdiction of the Contracting Parties, in order to achieve the purposes of the network as described in paragraph 2.1 of OSPAR Recommendation 2003/3;
- e. if appropriate, and in accordance with UNCLOS, consider, in consultation with the international organisations having the necessary competence, how such protection could be achieved for areas identified under (d) and how to include such areas as components of the network;
- f. identify any gaps which need to be filled in order to achieve the OSPAR Network by 2010 and maintain it thereafter, and take steps towards filling any such gaps;
- g. create and maintain a publicly available database of the OSPAR Network;
- h. develop practical guidance on the application of the Guidelines for the Management of Marine Protected Areas in the OSPAR Maritime Area;
- i. develop guidance on, and make arrangements for, assessing how effectively the management of the components of the OSPAR Network of Marine Protected Areas is achieving the aims for which those areas were selected;
- j. in 2010 and periodically thereafter, assess whether an ecologically coherent network of well-managed marine protected areas in the maritime area has been achieved.
- 4.5 Under the approach addressing human activities:
 - a. Assessments of human activities will be prepared according to the timetable under the Joint Assessment and Monitoring Programme. Special attention will be given to those human activities that impact upon the species and habitats that have been placed on the OSPAR List of Threatened and Declining Species and Habitats, or for those for which Ecological Quality Objectives have been (or are to be) agreed;
 - b. On the basis of those assessments, and in accordance with a timetable agreed on the basis of them, appropriate measures within the sphere of competence of OSPAR will be adopted for the protection of those species and habitats, or the attention of the competent authorities will be drawn to the need for such measures.
- 4.6 When implementing this strategy, due consideration shall be given to the question whether any particular programme or measure should apply to all, or only a specific part of the maritime area.

5. Overall Evaluation and Review of Progress

5.1 The Commission will review progress achieved through this strategy within the framework of the Joint Monitoring and Assessment Programme. In the light of such reviews, the periodic Ministerial Meetings of the Commission will consider whether any changes to the strategy are needed.

II - Eutrophication³⁸

1. Objective

1.1 In accordance with the general objective, OSPAR's objective with regard to eutrophication is to combat eutrophication in the OSPAR maritime area, in order to achieve and maintain a healthy marine environment where eutrophication does not occur.

2. Guiding Principles

- 2.1 The strategy will use the following principles as a guide:
 - a. the precautionary principle;
 - b. that preventive action should be taken;
 - c. that environmental damage should, as a priority, be rectified at source; and
 - d. that the polluter should pay.

3. Strategy

- 3.1 Areas of the maritime area, for which actions are needed, will be identified by the Common Procedure for the Identification of the Eutrophication Status of the Maritime Area (the "Common Procedure") which will be used to characterise each part of the maritime area as a problem area or a potential problem area or a non-problem area with regard to eutrophication. In implementing the Common Procedure, the Commission will from time to time:
 - a. further develop and adopt common assessment criteria;
 - b. assess the results of its application by Contracting Parties.

The identification of the eutrophication status of their parts of the maritime area will be made by Contracting Parties.

- 3.2 Actions required, within their respective functions, by the Commission, or individually or jointly, by Contracting Parties, will depend upon that classification as follows:
 - in the case of non-problem areas with regard to eutrophication, the status of the area with regard to eutrophication will be reassessed by applying the Common Procedure if there are grounds for concern that there has been a substantial increase in the anthropogenic nutrient load;
 - b. in the case of potential problem areas with regard to eutrophication, preventive measures should be taken in accordance with the Precautionary Principle.
 - Furthermore, there should be urgent implementation of monitoring and research in order to enable a full assessment of the eutrophication status of each area concerned within five years of its being characterised as a potential problem area with regard to eutrophication;
 - c. in the case of problem areas with regard to eutrophication:
 - (i) measures shall be taken to reduce or to eliminate the anthropogenic causes of eutrophication;
 - (ii) reports shall be provided on the implementation of such measures;
 - (iii) assessments shall be made of the effectiveness of the implementation of the measures on the state of the marine ecosystem.
- 3.3 Actions should comprise an integrated target-oriented and source-oriented approach, as described in the following paragraphs.
- 3.4 The main elements of the target-orientated approach are as follows:
 - a. an evaluation from time to time of the situation in the maritime area that is expected following the implementation of agreed measures;
 - b. the completion of the pilot project for the North Sea on ecological quality objectives, involving the trial application of a set of agreed ecological quality objectives for a

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A number of terms used in this strategy are defined in Appendix 1.

- number of ecological quality issues and related elements, together with the development of further ecological quality objectives for other ecological quality issues and ecologically quality elements;
- c. in the light of that pilot project and other work, evaluation of environmental quality against clear ecological objectives, both as a long-term system for the North Sea and in other OSPAR regions.
 - Such ecological quality objectives are intended to reflect the state of region-specific marine ecosystems in areas for which there are no grounds for concern that anthropogenic nutrient enrichment has caused eutrophication or may in future do so.
 - These ecological quality objectives should be reviewed, and if necessary revised, in the light of scientific developments;
- d. the setting of intermediate targets, in order to work towards attaining such objectives. Such targets should be combined with an indication of the size of further nutrient reductions required, estimated on the basis of an evaluation of the situation that is expected following the implementation of agreed measures, and possible means to achieve these reductions, taking into account § 3.5.
- 3.5 The source-oriented approach has the following main elements:
 - a. throughout the Convention area the following basic requirements:
 - (i) the implementation of any national or international measures as adopted by individual Contracting Parties for the reduction of nutrients in discharges/emissions from industry, sewage treatment plants, agriculture and other diffuse sources;
 - (ii) the promotion of good housekeeping in industry and sewage treatment and of good agricultural practice and ecological agriculture including proper use of the approach of aiming to strike a balance between the amounts of nutrients in the fertiliser applied and the requirements of the crop, and that proper attention is given to ammonia emissions;
 - b. in all areas from which nutrient inputs are likely, directly or indirectly, to contribute to inputs into problem areas with regard to eutrophication the following additional requirements:
 - (i) the implementation by Contracting Parties concerned³⁹ of:
 - PARCOM Recommendation 88/2 on the Reduction in Inputs of Nutrients to the Paris Convention Area;
 - PARCOM Recommendation 89/4 on a Coordinated Programme for the Reduction of Nutrients;
 - PARCOM Recommendation 92/7 on the Reduction of Nutrients Inputs from Agriculture into Areas where these Inputs are likely, directly or indirectly, to cause Pollution;
 - any future OSPAR instruments updating these Recommendations;
 - (ii) the implementation of any further national or international measures for specific areas as adopted by individual Contracting Parties for the reduction of nutrients in discharges/emissions from industry, sewage treatment plants, agriculture and other diffuse sources;
 - (iii) the application of further measures, in all areas from which anthropogenic nutrient inputs to the maritime area continue to affect problem areas with regard to eutrophication or to be a cause for concern (following the implementation of the measures mentioned above and/or anticipated on the basis of § 3.4), i.e. the most appropriate combination *inter alia* of:
 - BAT specifically designed for nitrogen and phosphorus removal from urban and industrial sewage;

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These Recommendations apply in the form in which they were adopted.

- BAT and/or BEP for agriculture (including horticulture), forestry and aquaculture;
- other measures relating to other sectors.

Such further measures should take into account their feasibility, cost-effectiveness, region-specific factors and seasonal factors. They should be complemented, as appropriate, by steps by the competent international bodies for the reduction of atmospheric emission of nitrogen;

- c. in all areas from which nutrient inputs are likely, directly or indirectly, to contribute to inputs into potential problem areas with regard to eutrophication, preventive measures have to be taken in accordance with the precautionary principle. Contracting Parties concerned should report to the Commission on proposed action in this respect and should explain their expected results.
- 3.6 The source-orientated component should be developed and applied without delay.
- 3.7 When and where it is established that problem areas and potential problem areas with regard to eutrophication have achieved the status of non-problem areas with regard to eutrophication, measures should be kept at a level that ensures that this improved status is maintained. Ecological quality objectives, when and where they are developed and adopted by OSPAR, also serve as tools for establishing whether the measures for the reduction of nutrients at source are sufficient.
- 3.8 The further measures mentioned under §3.5b(iii) should include more stringent measures in areas where BAT and BEP are insufficient to achieve either the ecological quality objectives or, where applicable, the intermediate targets.
- 3.9 Within the framework of the European Marine Strategy, the Commission will seek to contribute through this work to achieving comprehensive, harmonised assessments of the extent of marine eutrophication, and to supporting efforts to combat eutrophication, in all European seas.

4. Timeframe

4.1 The Commission will implement this strategy progressively by making every effort to combat eutrophication in the maritime area, in order to achieve, by the year 2010, a healthy marine environment where eutrophication does not occur. To this end, the Commission will take the steps necessary to achieve by 2005, in parallel with the adoption of an integrated set of Ecological Quality Objectives for application in a pilot project for the North Sea, an agreement on any additional programmes and measures deemed necessary, including, as appropriate, further intermediate targets for specific areas and the further development of ecological quality objectives.

5. Implementation

- 5.1 This strategy will be implemented and the details developed in line with the Commission's commitment to an ecosystem approach and according to the periodic work programmes, which will establish priorities, assign tasks, and set deadlines and targets.
- 5.2 The work will include:
 - the assessment of the eutrophication status of the OSPAR maritime area under the Joint Assessment and Monitoring Programme in accordance with the Common Procedure;
 - b. the improvement of appropriate reporting procedures;
 - c. the identification and quantification of the various sources of nutrients (e.g. by sector, sub-catchment, catchment, region, nation and/or other relevant subdivision);
 - the development of measures to combat eutrophication in order to achieve the Ecological Quality Objectives or associated intermediate targets that are agreed; and
 - e. the establishment of the direct and indirect links between the various sources of nutrients and any eutrophication problems, and hence the significance of those sources.

- 5.3 The implementation of this strategy will take place within the framework of the obligations and commitments of the various Contracting Parties, individually or jointly, in this field, in particular:
 - a. the developing European Marine Strategy to Protect and Conserve the Marine Environment;
 - b. the obligations of the Member States of the European Community and the European Economic Area to implement the measures adopted for the reduction of nutrient discharges and emissions, inter alia, Directive 2001/81/EC on national emission ceilings for certain atmospheric pollutants, the Water Framework Directive 2000/60/EC, Council Directive 91/271/EEC (Urban Waste Water Directive) and Council Directive 91/676/EEC (Nitrate Directive); and the IPPC Directive 96/61/EC, and the provisions of the Council Regulation (EC) 1257/1999 on support for rural development from the European Agricultural Guidance and Guarantee Fund;
 - measures stipulated in the Protocol Concerning the Control of Emissions of Nitrogen Oxides or their Transboundary Fluxes adopted within the framework of the Convention on Long-Range Transboundary Air Pollution (LRTAP Convention);
 - d. for those Contracting Parties concerned, the commitments of the North Sea States made at the North Sea Conferences, in particular paragraph 62 of the Bergen Declaration.

6. Overall Evaluation and Review of Progress

6.1 The Commission will review progress achieved through this strategy within the framework of the Joint Monitoring and Assessment Programme. In the light of such reviews, the periodic Ministerial Meetings of the Commission will consider whether any changes to the strategy are needed.

III - Hazardous Substances⁴⁰

1. Objective

1.1 In accordance with the general objective, the objective of the Commission with regard to hazardous substances is to prevent pollution of the maritime area by continuously reducing discharges, emissions and losses of hazardous substances (as defined in Annex 2), with the ultimate aim of achieving concentrations in the marine environment near background values for naturally occurring substances and close to zero for man-made synthetic substances.

2. Guiding Principles

- 2.1 The strategy will use the following principles as a guide:
 - a. assessments made, and programmes and measures adopted, to achieve the objective and implement the strategy will be in accordance with the general obligations as set out in Article 2 of the OSPAR Convention and consequently will involve the application of:
 - (i) the precautionary principle;
 - (ii) the polluter pays principle;
 - (iii) best available techniques and best environmental practice, including, where appropriate, clean technology;
 - b. in addition, the principle of substitution, i.e. the substitution of hazardous substances by less hazardous substances or preferably non-hazardous substances where such alternatives are available 41, is a means to reach this

A number of terms used in this strategy are defined in Appendix 2.

[&]quot;Available" in the context of substitution must be understood in the same sense as in the definition of Best Available Techniques in the OSPAR Convention 1992 and should take into account the principles contained in the definition of Best Environmental Practice in the OSPAR Convention 1992 related to substitution of products.

objective;

- emissions, discharges and losses of new hazardous substances shall be avoided, except where the use of these substances is justified by the application of the principle of substitution;
- d. in the work to achieve the objective, the scientific assessment of risks (in connection with the criteria stipulated at Appendix 2 of the 1992 OSPAR Convention and in connection with Annex IV of the 1992 OSPAR Convention) is a tool for setting priorities and developing action programmes.

3. Strategy

- 3.1 The Commission will develop programmes and measures to identify, prioritise, monitor and control (i.e., to prevent and/or reduce and/or eliminate) the emissions, discharges and losses of hazardous substances which reach, or could reach, the marine environment. To this end the Commission will:
 - a. complete and maintain a dynamic selection and prioritisation mechanism to select the hazardous substances to be given priority in its work.
 - Criteria to be used in this selection and prioritisation mechanism include that the substances or groups of substances:
 - due to their highly hazardous properties, are a general threat to the aquatic environment;
 - (ii) show strong indications of risks for the marine environment;
 - (iii) have been found widespread in one or more compartments of the maritime area, or may endanger human health via consumption of food from the marine environment:
 - (iv) reach, or are likely to reach, the marine environment from a diversity of sources through various pathways;

The Commission will stimulate the further development of the criteria for hazardous substances namely toxicity, persistency and liability to bioaccumulate with respect to the marine environment and improve their operation as part of the work to implement this strategy. As working definitions, the Commission will use the criteria which it adopted in 2001⁴², or any subsequent modification. The application of these criteria should both reflect the hazardous characteristics of substances or groups of substances and give priority to their actual or potential occurrence and effects in the maritime area;

- b. carry forward the drawing up of programmes and measures in relation to the OSPAR List of Chemicals for Priority Action, as it is up-dated from time to time;
- c. apply the selection mechanism to substances and groups of substances of concern including those substances and groups of substances set out in the OSPAR List of Substances of Possible Concern, as it stands from time to time, in order to review the OSPAR List of Chemicals for Priority Action and to apply the prioritisation mechanism to rank these substances in order of priority;
- d. support the work of other relevant international bodies (e.g. UNEP, UN-ECE, OECD and IMO) and countries in taking the necessary measures to control persistent organic pollutants (POPs), heavy metals and other hazardous substances, on the grounds that these substances may enter the Convention Area and have otherwise been phased-out or are under action by OSPAR;
- e. as soon as possible, develop or adopt, as part of the selection mechanism, a means of identifying substances which give reasonable grounds for concern that they are endocrine disruptors, and on this basis identify the substances on the OSPAR List of Substances of Possible Concern which give rise to such concerns. To this end, the Commission will:
 - develop and apply appropriate evaluation criteria (involving the use of internationally recognised testing procedures where these are available) to establish whether substances on these lists of potential endocrine disruptors

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- list have the potential to cause adverse effects to organisms in the marine environment:
- (ii) collaborate with various international forums with a view to optimising international research effort on endocrine disruptors leading to the development of testing and assessment tools for identifying substances of concern and their occurrence and distribution and effect in the marine environment;
- f. address, in developing programmes or measures in relation to any substance, all relevant aspects of that substance, including its toxicity and its ability to disrupt endocrine processes;
- g. keep the selection mechanism, including the means of identifying endocrine disruptors, under review to ensure that it remains effective to identify all aspects of hazard and risk which should give rise to reasonable grounds of concern about substances taking account of developments in the International Forum on Chemical Safety and the UN-ECE Convention on Long-range Transboundary Air Pollution.

4. Timeframe

4.1 The Commission will implement this strategy progressively by making every endeavour to move towards the target of the cessation of discharges, emissions and losses of hazardous substances by the year 2020.

5. Implementation

- 5.1 This strategy will be implemented and the details developed in line with the Commission's commitment to an ecosystem approach and according to the periodic work programmes which will establish priorities, assign tasks, and set deadlines and targets. These commitments will concentrate on substances of the highest concern to the marine environment and make best use of resources. This is likely to involve developing stronger links with other international bodies.
- 5.2 Effective action is to be taken when there are reasonable grounds for concern that hazardous substances introduced into the marine environment, or which reach or could reach the marine environment, may bring about hazards to human health, harm living and marine ecosystems, damage amenities or interfere with other legitimate uses of the sea, even when there is no conclusive evidence of a causal relationship between the inputs and the effects.
- 5.3 With regard to hazardous substances identified by the Commission for action, such action should include:
 - identifying the sources of hazardous substances and their pathways to the marine environment, using, *inter alia*, information derived from monitoring, research, specific surveys and assessment activities;
 - b. establishing with the help of an appropriate combination of monitoring, modelling, risk characterisation and risk assessment techniques, whether these sources represent either a widespread problem or a problem restricted to regional or local environments within the maritime area:

and, as a result.

- c. the identification of relevant measures to deal with the problem, including the adoption of measures to reduce discharges, emissions and losses of hazardous substances and taking into account the sources and pathways of hazardous substances and the substitution of hazardous substances with less hazardous (or, preferably, non-hazardous) substances, taking into account the sources and pathways of the hazardous substances.
- 5.4 There is limited experience with the scientific assessment of the risk of potential hazardous substances in the marine environment, particularly as regards the consequences of extremely large dilution, low degradation rates and long term exposure on marine organisms. The Commission therefore will address the following issues as a matter of urgency:
 - a. the development of the relevant scientific tools for assessing risks of potential hazardous substances in the marine environment. The Commission will cooperate

with the EU in accelerating progress in improving such tools, drawing upon the relevant elements in the existing EU Technical Guidance in Support of Directive 93/67/EEC on Risk Assessment for New Notified Substances and Regulation EC 1488/94 on Risk Assessment for Existing Substances, and future expansions of that guidance;

- b. the extent to which methodologies and results of a freshwater risk-assessment, or of any other relevant risk assessment, can be translated to and used for the assessment of the risk that a substance poses to the marine environment.
- 5.5 Measures should be selected taking into account:
 - a. the sustainability of the marine ecosystem;
 - b. the guiding principles;
 - c. an assessment of the advantages, disadvantages and effectiveness of proposed measures.

In order to support sustainable development and consumption, measures should also, to the greatest extent possible, encourage the principles of "green chemistry" as described in paragraph 5.8 below. When deciding upon the implementation of such measures the most cost-effective measures should have the highest priority. Risk reduction measures should be developed and/or applied in the light of the requirements laid down in the definitions of BAT and BEP in the OSPAR Convention. If in this process hazardous substances are to be substituted by other available ⁴³ substances, it has to be ensured that less hazardous, or preferably non-hazardous, substances are to be selected.

- 5.6 The Commission and Contracting Parties, individually or jointly, will endeavour to maintain and develop further a constructive dialogue with regard to hazardous substances with all parties concerned, including producers, manufacturers, user groups, authorities and environmental NGOs. This should ensure that all relevant information, such as reliable data on production volumes, use patterns, emission scenarios, exposure concentrations and on properties of substances, is available for the work of the Commission in connection with this strategy.
- 5.7 The Commission will invite industry to cooperate in fulfilling the objective of OSPAR with regard to hazardous substances.
- 5.8 Taking into account the increased environmental awareness, industry could help in achieving this OSPAR objective through:
 - a. the incorporation, as a strategy, of the objective in their development of clean production and clean products, and in this context the promotion of "green chemistry", including:
 - (i) the encouragement of the use and development of environmentally sound products and the development of less hazardous, or preferably non-hazardous, substances;
 - (ii) the employment of usages and practices during the manufacture, use and ultimate disposal of chemicals (whether as intermediates, products or residues), including waste handling and waste management, that reduce, or preferably avoid, the use of hazardous substances and that avoid losses of hazardous substances to the environment;
 - (iii) the provision of alternatives to the use of hazardous substances in processes other than the manufacture of hazardous substances;
 - b. the provision of reliable data on production volumes, use patterns, emission scenarios, exposure concentrations and properties of substances.

The attitude of regulatory authorities can influence these approaches.

[&]quot;Available" in the context of substitution must be understood in the same sense as in the definition of Best Available Techniques in the OSPAR Convention 1992 and should take into account the principles contained in the definition of Best Environmental Practice in the OSPAR Convention 1992 related to substitution of products.

- 5.9 Pollution from diffuse sources becomes in comparison with point sources more and more important. Various (groups of) substances, products and pollutants from many different diffuse sources continue to pose a serious threat to the environment. Such sources are large in number, highly diverse and extend over a wide geographical area and the pollutants often follow a complex path through different environmental media / compartments before entering or reaching the marine environment. In some cases the sources are mobile, and even create transboundary effects and may cause varying loadings over time. These problems will be taken into account in analysing the options for action with regard to hazardous substances.
- 5.10 The management of dredged materials containing hazardous substances requires special consideration because of the existing occurrence of such substances in sediments and the problem of their removal. Such management is regulated by the OSPAR Guidelines on the Management of Dredged Materials (as revised from time to time), and any programmes or measures adopted under Annex II of the OSPAR Convention.
- 5.11 In order to achieve internationally harmonised approaches and to avoid duplication of work, on hazardous substances, the Commission will ensure that measures and information (e.g. principles and methodologies, specific targets and BAT/BEP work) which have already been agreed (*inter alia* by means of legally binding instruments, recommendations or by way of political commitments) or which are being negotiated by Contracting Parties in other forums⁴⁴ are considered by the Commission, as appropriate, in the development of measures and initiatives to control hazardous substances within OSPAR. Contracting Parties shall bring these measures and this information to the attention of the Commission. When significant common ground has been identified in measures and initiatives proposed by OSPAR and those of other forums, the Commission will initiate appropriate discussions to determine what level of cooperation and liaison is necessary.
- 5.12 Contracting Parties which participate in other forums will, if appropriate, endeavour to ensure that programmes and measures on hazardous substances developed within these other forums are compatible with any relevant programmes and measures adopted by the Commission.
- 5.13 The implementation of this strategy should take due account of Article 24 on regionalisation and Annex IV on assessment of the quality of the marine environment of the OSPAR Convention 1992.

6. Overall Evaluation and Review of Progress

6.1 The Commission will review progress achieved through this strategy within the framework of the Joint Assessment and Monitoring Programme. In the light of such reviews, the periodic Ministerial Meetings of the Commission will consider whether any changes to the strategy are needed.

IV - Offshore Oil and Gas Industry

1. Objective

1.1 In accordance with the general objective, the objective of the Commission with regard to the setting of environmental goals for the offshore oil and gas industry and the establishment of improved management mechanisms to achieve them is to prevent and eliminate pollution and take the necessary measures to protect the maritime area against the adverse effects of

Other forums include the EU (e.g. through relevant EC Directives and Regulations, in particular, the IPPC Directive (96/61/EC) and the future the European Community Directive of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy (2000/60/EC), OECD, UN-ECE, UNEP (the Global Programme of Action for the Protection of the Marine Environment against Pollution from Land-Based Sources), the Helsinki and Barcelona Conventions, the international river organisations, the Arctic Council and the North Sea Conference.

offshore activities⁴⁵ so as to safeguard human health and to conserve marine ecosystems and, when practicable, restore marine areas which have been adversely affected.

1.2 The objectives of the other OSPAR strategies apply in so far as they relate to offshore activities.

2. Guiding principles

- 2.1 The strategy will use the following principles as a guide:
 - a. assessments made, and programmes and measures adopted, to achieve the objective and implement the strategy will be in accordance with:
 - (i) the general obligations as set out in Article 2 of the OSPAR Convention and consequently will ensure the application of:
 - the precautionary principle;
 - the polluter pays principle;
 - best available techniques and best environmental practice, including, where appropriate, clean technology;
 - (ii) the relevant provisions set out in Annex III to the OSPAR Convention and consequently will ensure that, in setting priorities and in assessing the nature and extent of the programmes and measures and their time scales, the criteria given in Appendix 2 to the OSPAR Convention are used;
 - (iii) the principle of sustainable development;
 - (iv) the relevant provisions of Annex V of the OSPAR Convention which will ensure the application of an integrated ecosystem approach;
 - b. the waste management hierarchy of avoidance, reduction, re-use, recycling, recovery, and residue disposal.
- 2.2 The relevant guiding principles of the other OSPAR strategies will equally guide this Strategy.

3. Strategy

- 3.1 The Commission will carry forward the development of programmes and measures in respect of all phases of offshore activities in accordance with the provisions of the OSPAR Convention. This means that the Commission will address the programmes and measures:
 - a. needed to prevent, control and eliminate pollution under Annex III of the OSPAR Convention:
 - b. to be adopted under Annex V of the OSPAR Convention following the identification of relevant human activities⁴⁶ by the application of the criteria in Appendix 3 of the OSPAR Convention;

and, to these ends, will undertake activities as set out in following paragraphs.

General process of establishing goals and measures

- 3.2 In addition to work in hand, the Commission will:
 - a. where necessary collect information about threats to the marine environment from pollution or from adverse effects from offshore activities;
 - b. on the basis of that information and from information already available, establish priorities for taking action;

"activities carried out in the maritime area for the purposes of the exploration, appraisal or exploitation of liquid and gaseous hydrocarbons."

Defined in the OSPAR Convention as:

The first candidate list of human activities given in § 2.2 (c) of the OSPAR Strategy on the Protection and Conservation of the Ecosystems and Biological Diversity of the Maritime Area, which needs to be assessed in accordance with the criteria of Appendix 3 of the OSPAR Convention, includes, *inter alia*, the exploration for oil and gas and the placement of structures for the exploitation of oil and gas.

- c. establish and periodically review environmental goals⁴⁷ and timeframes for the purpose of achieving the objective of this strategy through:
 - (i) the prevention and elimination of pollution from offshore sources⁴⁸;
 - (ii) the protection and conservation of the maritime area against other adverse effects of offshore activities:

These environmental goals should be in measurable terms, wherever practicable, in order to facilitate monitoring in accordance with Annex IV of the Convention;

- d. assess the extent to which existing programmes and measures meet, or will meet, these environmental goals;
- e. where this assessment shows it to be necessary, revise existing measures and/or develop and adopt new measures.

Prevention and elimination of pollution from offshore sources

3.3 As part of the general process set out in paragraph 3.2, the Commission will develop and keep under review programmes and measures to identify, prioritise, monitor and control (i.e. to prevent and/or reduce and/or eliminate) the emissions, discharges and losses of substances which reach or could reach the marine environment and which cause, or are likely to cause, pollution. This will include:

Control system for the use and reduction of the discharge of offshore chemicals

a. the implementation of OSPAR Decision 2000/2 on a Harmonised Mandatory Control System for the Use and Reduction of the Discharge of Offshore Chemicals and its related measures, including their further review as necessary;

Chemicals identified for priority action

b. the drawing up of programmes and measures in relation to the use and discharge of offshore chemicals which are on the OSPAR List of Chemicals for Priority Action under the OSPAR Strategy with regard to Hazardous Substances, as reviewed from time to time:

Other substances

- development of programmes and measures for:
 - (i) the reduction of discharges, or substitution, of other chemicals after establishing priorities in accordance with paragraph 3.3(a);
 - (ii) the reduction of discharges of oil from offshore sources, *inter alia*, by implementing and reviewing as necessary OSPAR Recommendation 2001/1 for the Management of Produced Water from Offshore Installations;
 - (iii) where an assessment shows it to be necessary, further measures for the reduction of discharges of radioactive substances;
- d. the establishment of priorities for taking action in relation to those other substances in accordance with paragraph 3.2 (d) and (e).

Protection and conservation of the maritime area against adverse effects of offshore activities other than pollution

3.4 As a further part of the general process set out in paragraph 3.2, and in line with OSPAR's Strategy on the Protection and Conservation of the Ecosystems and Biological Diversity of the Maritime Area, the Commission will carry out assessments of the potential adverse effects, other than pollution, arising from offshore activities on the ecosystems and

"offshore installations and offshore pipelines from which substances or energy reach the maritime area."

Where stepwise implementation is desirable, intermediate goals could also be established.

Defined in the OSPAR Convention as:

[&]quot;Offshore installation" means any man-made structure, plant or vessel or parts thereof, whether floating or fixed to the seabed, placed within the maritime area for the purpose of offshore activities.

[&]quot;Offshore pipeline" means any pipeline which has been placed in the maritime area for the purpose of offshore activities.

biological diversity of the maritime area. That strategy has already identified among the first candidate list of human activities for assessment:

- a the exploration for oil and gas;
- b. the placement of structures, cables and pipelines for oil and gas exploration and exploitation.
- 3.5 In the light of these assessments, the Commission will pursue the activities outlined in paragraph 3.2. The resulting programmes and measures could include:
 - a. the prevention, where practicable, of further adverse effects such as those resulting from the natural redistribution of waste which was disposed of in the past;
 - guidance for the selection of areas and sites which need to be protected from offshore activities due to their inherent sensitivity and the risks which such activities may pose;
 - c. the restoration, where practicable, of marine areas which have been adversely affected by offshore activities.

Implementation and enforcement

- 3.6 The Commission with the support of the Contracting Parties concerned will promote the development and implementation by the offshore industry of environmental management mechanisms, including elements for auditing and reporting, which are designed to achieve both continuous improvement in environmental performance and the environmental goals referred to in paragraph 3.2.c and more generally to fulfil the objective of this strategy.
- 3.7 Through open discussion with the offshore industry and other interested international non-governmental organisations, the Commission will promote the joint development of environmental best practice guidelines for offshore activities for the purpose of giving effect to the principle of sustainable development.

4. Time frame

- 4.1 This strategy will be implemented progressively and, in so far as they apply, following on and consistent with the commitments made in the other OSPAR strategies. To this end, the Commission will take the following intermediate steps:
 - a. by its meeting in 2005, the Commission will establish environmental goals in respect of the protection and conservation of the maritime area against adverse effects of offshore activities other than pollution;
 - b. by its meeting in 2006, the Commission will have:
 - established further environmental goals and, where appropriate, intermediate goals, in respect of prevention and elimination of pollution from offshore sources;
 - (ii) identified further steps to be taken to implement this strategy;
 - c. by its meeting in 2008, the Commission will review and, if appropriate, amend the categories of disused offshore installations where derogations from paragraph 2 of OSPAR Decision 98/3 on the Disposal of Disused Offshore Installations may be considered.

5. Implementation

- 5.1 The strategy will be implemented and developed in line with the Commission's commitment to an ecosystem approach and according to the periodic work programmes which will establish priorities, assign tasks, and set deadlines, *inter alia*, to make the best use of resources. These commitments will concentrate on those offshore activities identified as being of greatest concern to the marine environment which could include, *inter alia*:
 - a. the use and discharge of hazardous substances, consistent with the OSPAR Strategy with regard to Hazardous Substances;
 - b. discharges of oil and other chemicals in water and from well operations;
 - c. emissions of substances likely to pollute the air, to the extent that they are not regulated by other international agreements;

- d. flaring, to the extent that emission from flaring is not regulated by other international agreements:
- e. the disposal of naturally occurring radioactive material in the form of low specific activity radioactive scales and sludges.
- 5.2 Measures should be selected taking into account:
 - a. the sustainability of the marine ecosystem;
 - b. the guiding principles;
 - an assessment of the advantages, disadvantages and effectiveness of proposed measures.

When deciding upon the implementation of such measures, the most cost effective measures should have the highest priority.

- 5.3 Contracting Parties which participate in other forums will, if appropriate, endeavour to ensure that programmes and measures relevant to this strategy, which are developed within these other forums (e.g. under the developing European Marine Strategy to Protect and Conserve the Marine Environment), are compatible with any relevant programmes and measures adopted by the Commission.
- 5.4 With a view to progressively develop Best Available Techniques and Best Environmental Practice, the Commission will promote the sharing of information and experience between Contracting Parties, non-governmental organisations and the general public.

6. Overall evaluation and review of progress

6.1 The Commission will review progress achieved through this strategy within the framework of the Joint Monitoring and Assessment Programme. In the light of such reviews, the periodic Ministerial Meetings of the Commission will consider whether any changes to the strategy are needed.

V - Radioactive Substances⁴⁹

1. Objective

- 1.1 In accordance with the general objective, the objective of the Commission with regard to radioactive substances, including waste, is to prevent pollution of the maritime area from ionising radiation through progressive and substantial reductions of discharges, emissions and losses of radioactive substances, with the ultimate aim of concentrations in the environment near background values for naturally occurring radioactive substances and close to zero for artificial radioactive substances. In achieving this objective, the following issues should, *inter alia*, be taken into account:
 - a. legitimate uses of the sea;
 - b. technical feasibility;
 - c. radiological impacts on man and biota.

2. Guiding Principles

- 2.1 Assessments made, and the programmes and measures adopted, to achieve this objective will be in accordance with the general obligations as set out in Article 2 of the OSPAR Convention and consequently will involve the application of:
 - a. the precautionary principle;
 - b. the polluter pays principle;
 - c. best available techniques and best environmental practice, including, where appropriate, clean technology.
- 2.2 When adopting programmes and measures in relation to radioactive substances, including waste, the Contracting Parties shall also take account of:

A number of terms used in this strategy are defined in Appendix 3.

- a. the recommendations of the other appropriate international organisations and agencies;
- b. the monitoring procedures recommended by these international organisations and agencies;
- existing scientific assessments of dose and risk as part of the tools for setting priorities and developing action programmes;
- d. the relevant international conventions and Contracting Parties' obligations under international law relevant to this OSPAR objective.

3. Strategy

- 3.1 The Commission will develop programmes and measures to identify, prioritise, monitor and control (i.e. to prevent and/or reduce and/or eliminate) the emissions, discharges and losses of radioactive substances caused by human activities which reach, or could reach, the marine environment and which could cause pollution through ionising radiation. To these ends, the Commission will⁵⁰:
 - a. identify radioactive substances and/or human activities which give rise to concern about the impact of discharges, emissions or losses of radioactive substances.

This identification should be based upon an evaluation of:

- the sources and pathways of radioactive substances and their concentrations in the maritime area;
- (ii) the radiation exposure of humans and marine ecosystems;
- (iii) biological and ecological effects in the marine environment, including the vulnerability of marine ecosystems, arising from existing and future foreseen discharges, emissions and losses of radioactive substances;
- (iv) other adverse effects which may affect other legitimate uses of the sea; and take account of:
- results of scientific investigations relevant to radioactive substances in the marine environment;
- (vi) existing methodologies for the scientific assessments of dose and risk;
- b. assess and prioritise such substances or activities to judge whether there is a need for action;
- c. develop programmes and measures which ensure the application of BAT/BEP including, where appropriate, clean technology and taking into account and not unnecessarily duplicating:
 - (i) work practices including waste management, that meet the objectives with regard to radioactive substances;
 - (ii) international conventions and standards;
 - (iii) the outcome of the study by the Nuclear Energy Agency of the OECD concerning a thorough technical review and an assessment of the reprocessing and non-reprocessing options for spent fuel management;
 - (iv) Contracting Parties' obligations under international law.
- 3.2 The Commission and Contracting Parties, jointly or individually, should encourage international organisations and agencies to develop further the scientific tools for assessing radiation exposure and risk especially to marine organisms.

The Commission will take account of all recommendations and methodologies, as well as legally binding documents, that have been developed in other international forums, and which are relevant to the OSPAR Strategy with regard to Radioactive Substances. Examples of relevant documents are the recommendations of the International Commission on Radiological Protection, the Safety Series 111 of the International Atomic Energy Agency, the Joint Convention on the Safety of Spent Fuel Management and the Safety of Radioactive Waste Management and the EU Basic Safety Standards.

4. Time Frame

4.1 This strategy will be implemented in accordance with the Programme for More Detailed Implementation of the Strategy with regard to Radioactive Substances⁵¹ in order to achieve by the year 2020 that the Commission will ensure that discharges, emissions and losses of radioactive substances are reduced to levels where the additional concentrations in the marine environment above historic levels, resulting from such discharges, emissions and losses, are close to zero.

5. Implementation

- 5.1 This strategy will be implemented and further developed in line with the Commission's commitments to an ecosystem approach and according to the Programme for the More Detailed Implementation of the Strategy with regard to Radioactive Substances and the periodic work programmes, which will establish priorities, assign tasks and set appropriate deadlines and targets. These commitments shall concentrate on substances and/or human activities of the highest concern to the marine environment and make best use of resources.
- 5.2 The Commission will review and prioritise radioactive substances and/or human activities which may give rise to concern in order to identify topics for action.
- 5.3 Effective action is to be taken by Contracting Parties concerned, when there are reasonable grounds for concern that radioactive substances introduced into the marine environment, or which reach or could reach the marine environment, may bring about hazards to human health, harm living resources and marine ecosystems, damage amenities or interfere with other legitimate uses of the sea, even when there is no conclusive evidence of a causal relationship between inputs and effects.
- 5.4 Action identified by the Commission should include:
 - assessment of those situations, including an identification of the sources of radioactive substances, their pathways to the marine environment, the relative contribution of remobilised historic discharges and current discharges and the radiation exposure which they cause to humans and marine ecosystems;
 - b. establishment, with the help of an appropriate combination of monitoring, modelling and dose and risk assessments, as to whether these sources represent a widespread problem or are restricted to regional or local environments within the maritime area;

and draw upon the work relevant to the concerns identified, which is carried out by other international organisations and agencies such as the update of the MARINA Project on the radiological exposure of the European Community from radioactivity in North European marine waters. The Commission should cooperate with such organisations and agencies in developing means of action which may contribute to the solutions of problems in the maritime area, *inter alia*, in the framework of the developing European Marine Strategy to Protect and Conserve the Marine Environment.

- 5.5. On the basis of the Programme for the More Detailed Implementation of the Strategy with regard to Radioactive Substances, the Commission will carry out an assessment whether the combined effect of the national plans of the Contracting Parties established under this programme will be to achieve the objective to the extent required by 2020, and evaluate progress in implementing the strategy against baselines agreed by the Commission for discharges of radioactive substances, their concentrations in the marine environment and the resultant doses to members of the public.
- 5.6 As a result, the Commission will identify and adopt relevant measures to deal with the problems.
- 5.7 The Commission will undertake the development of environmental quality criteria for the protection of the marine environment from adverse effects of radioactive substances in the light of the developments in other international forums. The Commission will develop programmes and measures to apply these criteria.

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OSPAR agreement with reference number: 2001-3.

- 5.8 Furthermore, the Commission will continue to develop programmes and measures to reduce radioactive discharges from nuclear installations to the marine environment by applying BAT.
- 5.9 The Commission and Contracting Parties, individually or jointly, will endeavour to maintain and develop further a constructive dialogue with regard to radioactive substances, including waste, with all parties concerned. This should ensure that all relevant information is available for the work of the Commission in connection with this strategy.
- 5.10 The implementation of this strategy should take due account of Article 24 on regionalisation and Annex IV on assessment of the quality of the marine environment of the OSPAR Convention 1992.

6. Overall evaluation and Review of Progress

6.1 The Commission will review progress achieved through this strategy within the framework of the Joint Monitoring and Assessment Programme. In the light of such reviews, the periodic Ministerial Meetings of the Commission will consider whether any changes to the strategy are needed.

Appendix 1

DEFINITIONS FOR THE PURPOSES OF THE EUTROPHICATION STRATEGY

- 1. For the purpose of the Eutrophication Strategy:
 - a. "Eutrophication" means the enrichment of water by nutrients causing an accelerated growth of algae and higher forms of plant life to produce an undesirable disturbance to the balance of organisms present in the water and to the quality of the water concerned, and therefore refers to the undesirable effects resulting from anthropogenic enrichment by nutrients as described in the Common Procedure;
 - b. "anthropogenic" within the context of this strategy qualifies any human activities which:
 - (i) can result in, or contribute to, eutrophication in the marine environment; and
 - (ii) can be managed and/or whose contribution to eutrophication can be prevented, reduced or eliminated;
 - c. "to combat" means to prevent, reduce and, to the extent possible, eliminate;
 - d. "problem areas with regard to eutrophication" are those areas for which there is evidence of an undesirable disturbance to the marine ecosystem due to anthropogenic enrichment by nutrients;
 - e. "potential problem areas with regard to eutrophication" are those areas for which there are reasonable grounds for concern that the anthropogenic contribution of nutrients may be causing or may lead in time to an undesirable disturbance to the marine ecosystem due to elevated levels, trends and/or fluxes in such nutrients;
 - f. "non-problem areas with regard to eutrophication" are those areas for which there are no grounds for concern that anthropogenic enrichment by nutrients has disturbed or may in the future disturb the marine ecosystem.
- 2. The following working definitions, which will be reviewed from time to time in the light of further developments, are proposed for the purpose of this strategy:
 - a. "ecological quality" is an expression of the structure and function of the ecological system taking into account natural physiographic, geographic and climatic factors as well as biological, physical and chemical conditions including those from human activities:
 - b. "ecological quality reference level" is the level of ecological quality where the anthropogenic influence on the ecological system is minimal;
 - c. "ecological quality objective" is the desired level of ecological quality relative to the reference level.

Appendix 2

DEFINITIONS FOR THE PURPOSES OF THE HAZARDOUS SUBSTANCES STRATEGY

- 1. For the purpose of the Hazardous Substances Strategy:
 - a. "hazardous substances"⁵² are substances which fall into one of the following categories:
 - (i) substances or groups of substances that are toxic, persistent and liable to bioaccumulate:
 - (ii) other substances or groups of substances which are assessed by the Commission as requiring a similar approach as substances referred to in (i), even if they do not meet all the criteria for toxicity, persistence and bioaccumulation, but which give rise to an equivalent level of concern.

This category will include both substances which work synergistically with other substances to generate such concern, and also substances which do not themselves justify inclusion but which degrade or transform into substances referred to in (i) or substances which require a similar approach.

The Commission will identify and assess such other substances or groups of substances using available information and internationally accepted methods and criteria;

- "substance" means a chemical element or compound in the natural state or obtained by any production process, including any additive necessary to preserve the stability of the product and any impurity deriving from the process used, but excluding any solvent which may be separated without affecting the stability of the substance or changing its composition;
- c. "group of substances" means a number of substances where:
 - the substances have been shown to present a similar level of hazard, using internationally accepted criteria; and
 - (ii) extrapolation from the assessment of an appropriate sample from among that number of substances has shown that those substances:
 - 1. require preventive action because of the level of risk which they pose to man and the environment; and
 - 2. are sufficiently related both in terms of their physico-chemical properties and their field of application to be jointly managed for the purposes of this strategy.
- 2. In the definition of hazardous substances, "toxicity" is defined as the capacity of a substance to cause toxic effects to organisms or their progeny in accordance with the criteria adopted by the Commission in 2001⁵³, or any subsequent modification.

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Substances which are hazardous solely because of their radioactive properties are not addressed by this strategy but by the OSPAR Strategy with regard to Radioactive Substances (Reference Number: 1998-17).

OSPAR Agreement 2001/1.

Appendix 3

DEFINITIONS FOR THE PURPOSES OF THE RADIOACTIVE SUBSTANCES STRATEGY

For the purposes of the Radioactive Substances Strategy:

- a. "Radioactive substances" mean natural occurring and artificial radionuclides;
- b. "Radiation exposure assessment" means the estimation of doses to which humans and marine organisms are or may be exposed and is based on the determination of the emissions, discharges and losses, the environmental transfers and exposure pathways (incl. food-chains) of radioactive substances;
- c. "Risk assessment" means the estimation of the likelihood of a radiation effect in humans or marine organisms.

Annex 7

2003 Strategy for a Joint Assessment and Monitoring Programme

Introduction

- 1. Scientific knowledge of the seas is the indispensable basis for all marine management. The OSPAR Convention rightly requires the Contracting Parties, amongst other things, to "cooperate in carrying out monitoring programmes", to develop quality assurance methods, and assessment tools and to "carry out...research which is considered necessary...to increase knowledge and understanding of the marine environment", "take into account scientific progress which is considered to be useful for... [such] ...assessment purposes and which has been made elsewhere", and imposes on the OSPAR Commission duties to "define and implement collaborative monitoring programmes", to "approve the presentation and interpretation of their results" and to "carry out [quality status] assessments", including in such assessments "both an evaluation of the effectiveness of the measures taken and planned for the protection of the marine environment and the identification of priorities for action".
- 2. This Joint Assessment and Monitoring Programme (JAMP) therefore sets out the basis on which the OSPAR Contracting Parties will work together in fulfilling these obligations over the period until 2010.
- 3. The Programme is described in three sections. The first section sets out the overall strategy, considering objectives, guiding principles, the nature of the assessments to be produced, the means to ensure scientific quality, the relationship with marine research, and the programme management. The second section gives a strategic overview of the assessments that are intended to be produced. The third section sets out in more details, for each of six themes, the issues to be addressed, the tools to be developed, the data collection to be undertaken and the assessments to be produced.

Section I – Strategy

A. Objectives

- 4. The main objectives of the JAMP are:
 - the preparation of environmental assessments of the status of the marine environment of the OSPAR maritime area or its regions, including the exploration of new and emerging problems in the marine environment;
 - the preparation of contributions to overall assessments of the implementation of the OSPAR Strategies, including in particular the assessment of the effects of relevant measures on the improvement of the quality of the marine environment. Such assessments will help inform the debate on the development of further measures;

supported by:

- c. the implementation of collective OSPAR monitoring, including the development of the necessary methodologies;
- d. the preparation of environmental data and information products needed to implement the OSPAR Strategies.

B. Guiding principles

5. The JAMP establishes a clear progression between the reasons for monitoring, data collection, assessment and decision making. This requires the definition of clear, verifiable management goals, i.e. goals that are in the form of a testable hypothesis, and the preparation of environmental assessments of the status of the marine environment of the OSPAR maritime area or its regions that are relevant to the management goals.

Commitment

6. Implementation of the JAMP implies provision by each Contracting Party of an appropriate level of resources to achieve the common intention. The value of a collaborative exercise in collecting information is substantially reduced if some partners do not fulfil the roles

foreseen for them. The commitments of each Contracting Party to its part of any collaborative effort therefore presuppose the loyal fulfilment by all other Contracting Parties of the commitments which they make to that element of this programme.

Economy of effort, added value and synergy

- 7. Since resources are inevitably limited, the aims must be to use them as efficiently as possible, to seek the maximum added value from OSPAR collaboration as a return to Contracting Parties from their contributions, and to seek synergy with other programmes and organisations, both inter-governmental and non-governmental.
- 8. The monitoring data and information generated by OSPAR through its co-ordinated environmental monitoring activities form the baseline for OSPAR's thematic and holistic assessments (see section C below) of the quality status of the OSPAR maritime area. Such data and information should generally be gathered in accordance with agreed OSPAR guidelines and procedures and thus be comparable across the breadth of the OSPAR maritime area.
- 9. All the material available from other organisations collecting information about the marine environment must be used to the fullest possible extent, subject to such checks and precautions as are needed to maintain the quality of the underlying science at a level sufficient for the purposes of each specific assessment.
- 10. It is particularly important that synergy is achieved between the monitoring activities under the JAMP and the requirements of EC Directives (such as those relating to the Water Framework Directive (WFD) and the Habitats Directive). So far as there is a spatial overlap in coastal waters between OSPAR and the WFD and an overlap in the issues addressed, there is a need to ensure a consistent approach in both organisations, and for each to prevent duplication by making the best use of the expertise and tools developed by the other.

Quality assurance

11. However well an assessment and monitoring programme is defined and executed, if there is no assurance that the information collected is of good quality and if it is not assessed appropriately, the total exercise will have little value. For this reason, OSPAR has adopted a quality assurance (QA) policy which acknowledges the importance of reliable information as the basis for effective and economic environmental policy and management regarding the OSPAR Convention area. This policy requires that QA procedures should be applied to the whole chain of JAMP activities, from programme design, through execution, evaluation and reporting to assessment. It recognises, nevertheless, that QA should be appropriate for the purpose of the assessment or monitoring activity to which it relates – that is, sufficient but not over-elaborate. OSPAR has agreed that steps should be taken to improve its QA procedures with the aim of ensuring that all necessary procedures are in place and sufficient for the purpose.

C. Nature of assessments

- 12. 'Assessment' is both a process and its product. As a process, a marine environmental assessment is a procedure by which information is collected and evaluated. It is undertaken from time to time to estimate the state of knowledge. Its product is an assessment report, which is a document synthesising information, presenting the findings of the assessment and making recommendations for action for future work. Assessments should include both a scientific/technical assessment and a management oriented summary.
- 13. This product can either be a thematic assessment dealing with one aspect of the marine environment, or a general assessment of all aspects of that environment. This programme sets out to produce both kinds of assessment product, in an integrated series, with the successive thematic assessments building up to a new general assessment in 2010.
- 14. A general assessment of the quality of the OSPAR maritime area or its sub-regions is defined as:

a statement of the whole or part of the current knowledge of the health of the environment of a defined maritime area and its coastal margin. A complete statement includes an analysis of the region's hydrodynamics, chemistry, habitats and biota with an evaluation of the impact of humans over space and time against this background of natural variability. All aspects of human influence on the maritime area concerned should be

examined. This should include discharges, emissions and losses of contaminants, nutrient and radioactive substances occurring in that maritime area, or reaching it from the catchments draining into it or by airborne transport. It should also include inputs, concentrations and environmental effects of contaminants, nutrients and radioactive substances, dumping, transport, and the exploitation of biological and non-biological resources. The evaluation of the effectiveness of measures taken and planned for the protection of the marine environment and the identification of priorities for action should also form part of it.

- 15. The purpose of both kinds of assessment is to provide both managers and scientists with:
 - a. a concise summary of contemporary knowledge and current management;
 - b. an identification of significant gaps in knowledge which can provide an authoritative basis for defining priorities for further scientific and other investigations; and
 - c. a basis for judging the effectiveness and adequacy of environmental protection measures and for making any necessary adjustments.

To achieve this, JAMP assessments will take into account all available relevant information. Where appropriate QA procedures have not been applied, caution will be needed in drawing conclusions.

- 16. In view of the objectives of the OSPAR Convention, assessments should focus on:
 - a. the extent to which contamination and other adverse effects of human activities occur;
 - b. whether human health is safeguarded;
 - c. whether the biological diversity of marine ecosystems is conserved, and the components of the marine environment are used in a sustainable way;
 - d. the effectiveness of the measures taken or planned for the protection of the marine environment; and
 - e. priorities for action.
- 17. In 1994 the Oslo and Paris Commissions agreed to divide the North-East Atlantic into five regions for assessment purposes:
 - a. Region I Arctic Waters;
 - b. Region II Greater North Sea;
 - c. Region III Celtic Seas;
 - d. Region IV Bay of Biscay and Iberian Coast;
 - e. Region V Wider Atlantic.

These regions (which are defined more precisely in Appendix 1) should continue to serve as the geographical basis for future regional assessments.

D. Ensuring scientific quality

- 18. The JAMP processes can be divided into three groups, according to the products that result from them:
 - a. the development of tools, or the adoption of those developed by other international bodies or other sources:
 - b. the specification and execution of information collection programmes (including monitoring in the narrower sense);
 - c. the production of assessments.

This section describes some approaches that should be adopted for these various processes, in order to ensure the scientific quality of the products. In effect, this section therefore provides criteria for the more detailed specifications for further work.

Development of tools

19. "Tools" covers all the procedures and techniques that are needed for collecting information, QA, and interpretation and assessment of data. To ensure the quality of the final OSPAR assessments, OSPAR will ensure that appropriate procedures and techniques are

developed (or adopted from other sources) for all major information collection and assessment exercises. There is a particular need to improve upon existing assessment tools such as background reference concentrations (BRCs) and ecotoxicological assessment criteria (EACs). It will be an important task under the general theme to check that there are comprehensive, coherent and consistent tools for such exercises. In this task, the available tools will need to be considered against the aims of the information collection programmes (including monitoring programmes) described below.

Specification and execution of information collection programmes

- 20. In specifying the ways in which the information needed for the JAMP will be collected, the following aims will need to be considered:
 - describing the spatial distribution of a range of physical, chemical, biological and other parameters (including human demography, the range and scale of human activities and the resulting impacts on the marine environment, and the distribution of other species and their populations);
 - b. determining temporal trends and/or discrete changes, either as a means of assessing the effectiveness of policy measures, or for the purpose of assessing, by the use of suitable indicators, the changes and variability in the quality of the marine environment; and
 - c. establishing links between anthropogenic pressures and observed impacts and other changes in the marine environment.

"Information collection" will need to cover all forms of gathering, compiling and processing data (including monitoring), as well as the collection of additional information of all kinds.

- 21. The OSPAR Convention (Annex IV, Article 1) defines monitoring as "the repeated measurement of:
 - a. the quality of the marine environment and each of its compartments, i.e. water, sediments and biota:
 - b. activities or natural and anthropogenic inputs which may affect the quality of the marine environment; and
 - c. the effects of such activities and inputs."
- 22. Monitoring may be focused on the measurement of either spatial distributions or temporal trends. Both constitute important elements of a monitoring programme. However, comparison of trends in monitoring data provides a significantly greater insight into the development of the quality status locally or across the breadth of the OSPAR maritime area than does the comparison of absolute values derived from one-off surveys or spatial monitoring programmes.
- 23. Monitoring and information collection programmes in this sense will need to be focused on providing the answers to specific questions and testing specific hypotheses. Ideally, this will require the identification of:
 - a. the variables for which information is to be collected;
 - b. the QA procedures to be applied;
 - c. the locations and the frequencies at which numerical values are to be collected;
 - d. the methods for assessing the monitoring results, including the way in which values are to be presented, when and by whom the results are to be assessed and the way in which the assessment is to be presented;
 - e. the other information needed for the assessment (such as normalisation parameters or numerical values for co-variables which could explain variations in the data produced by the monitoring).

Appropriate statistical approaches and methods will be used in the design and implementation phases of these monitoring and information collection programmes.

24. Regional differences in the general level of scientific information on the OSPAR maritime area, in inputs and in national monitoring programmes, may mean that certain temporal and spatial programmes will be region-specific.

- 25. In specifying any monitoring or other information collection programme, it is essential to optimise the use of the limited resources (particularly ship-time at sea) by promoting synergies between different types of monitoring and information collection, including the use of data from satellites and ships of opportunity. It is also important that when specifying monitoring or information collection programmes it is made clear when monitoring of a substance can terminate or be changed between regular or periodic monitoring. Further, the monitoring strategy for each substance should be clear in relation to the media for which data will be collected, and the sampling strategy to be followed (monitoring at fixed intervals or "event" orientated).
- 26. Assessments arising from monitoring data are critically dependent upon practical mechanisms for handling data from different activities, for example from integrated biological and chemical programmes, or linking the observed changes in spatial distribution and temporal trends in substances, or their effects, to inputs into the OSPAR maritime area. Steps will be needed to ensure that documents, data and products are managed consistently and are easily available to users.
- 27. The data storage and handling centres are therefore central in the process, and it is important that their role is clear and continuously developed and strengthened. A starting point is that data will be accessible to the OSPAR community along with any additional relevant information relating to its quality and comparability. Data management activities should be properly co-ordinated in co-operation with other conventions, governmental and non-governmental institutes, the EC and the European Environment Agency (EEA).

Production of assessments

- 28. When procedures for the production of assessments are established, there will be a task under the theme "General" (see paragraphs 51-57) to consider whether the arrangements for the collection and interpretation of information are sufficiently comprehensive and consistent with approaches under other themes to achieve a uniformly high quality in OSPAR assessments.
- 29. The high level of ambitions for a holistic quality status report (that is, to cover a wide range of issues in a single, balanced, all embracing view, to be understandable and interesting to a wide audience; and to be relevant to policy-making and decision-making) makes it necessary that Contracting Parties and other participants realise from the outset both the resource implications and the need to adhere to the agreed schedule of activities.

E. Relationship between the JAMP and marine research

- 30. There should be a two-way traffic between marine research and the work of OSPAR on marine environmental assessment and monitoring. OSPAR welcomes the endeavours of Contracting Parties' agencies and institutes and of observer organisations to help resolve questions raised by its work. However, OSPAR itself will not attempt to intervene in questions relating to the selection of projects for funding. In general, OSPAR highlights the need for marine research to study further:
 - the basic processes of the marine environment (biology, physics and chemistry) on different scales;
 - b. the causes of long-term changes identified by monitoring programmes; and
 - c. cause-effect relationships.
- 31. The products envisaged by the JAMP have a particular concern with new and emerging problems in the marine environment.
- 32. Furthermore, the need to improve marine environmental management tools and approaches (such as, the development of an ecosystem approach, mapping progress towards OSPAR's strategic objectives, and the basis for setting and use of ecological quality objectives (EcoQOs)) creates a powerful driving force towards developing a more sophisticated framework for the interpretation of marine environmental data and for better assessment tools to operate in that framework.

F. Programme management

- 33. As a result of the commitments in article 6 of, and Annex IV to, the OSPAR Convention, the JAMP is a continuous activity, not a one-off exercise. The current agreements on how it is to be conducted are set out in the JAMP Manual, as amended from time to time. The results of its various phases appear in the data and the assessments which OSPAR produces and publishes.
- 34. The working structure of the OSPAR Commission reflects its current strategic approach. The Environmental Assessment and Monitoring Committee (ASMO) retains the primary responsibility for environmental assessment and monitoring. The other Strategy Committees will work in close collaboration with ASMO in these matters. In accordance with its terms of reference, ASMO will contribute to assessments undertaken by other OSPAR Strategy Committees or by other forums, and respond to external requests for monitoring or assessment information.
- 35. ASMO will be responsible for recommending to OSPAR, in the case of thematic assessments on the basis of proposals from the relevant Strategy Committee, what should be the scope, content and method of all assessments. Where assessments require services from external data managing centres, ASMO will include in such recommendations an indication of the cost implications. For holistic reports, ASMO will take into account the recommendations and results of the relevant international organisations on the appropriate way to construct marine quality status reports.
- 36. The Secretariat will include appropriate elements to ensure the delivery of the products specified in this programme in the draft work programmes submitted to the Strategy Committees. The Secretariat will also submit to ASMO an annual report on the implementation of the JAMP. In the light of this report, and of the advice of the Strategy Committees, ASMO will:
 - a. propose any necessary changes in Sections I and II of the JAMP;
 - b. adopt any necessary revisions of the products and their descriptions in Section III (provided that where such revisions would have implications for the OSPAR budget, they shall not have effect until confirmed by OSPAR).
- 37. Such revisions will include any changes necessary to ensure that the products of the JAMP are consistent with the European Marine Strategy which is being developed on the initiative of the European Commission.
- 38. In managing the implementation of the JAMP, ASMO will be guided by the JAMP Implementation Plan. ASMO will be responsible for regularly updating this plan to ensure that it provides effective guidance on the purpose and content of each of the JAMP products and the method by which it is to be produced. Basing itself on the JAMP Implementation Plan, ASMO will ensure that the necessary products are included in its annual work programme and, with the assistance of the Secretariat, will draw to the attention of the other Strategy Committees similar needs for items to be included in their annual work programmes.

SECTION II - ASSESSMENTS SCHEDULE

- 39. OSPAR will aim to complete general assessments of the development in the quality status of the OSPAR maritime area and its (sub-) regions in 2010 and 2019. These assessments will, in particular, consider whether the progress under the OSPAR Strategies is still focusing on the most significant issues.
- 40. In the period until 2010, there will be a number of intermediate thematic assessments. These will be so designed that they will be able to be updated with relatively little effort for 2010, and incorporated in the general assessment for that year. This section gives a strategic overview of these thematic assessments, which are described in more details, together with the work on developing tools and collecting information, in Section III below. In addition to the main thematic assessments mentioned in this section, there will be other, more specific assessments as detailed in Section III. All these thematic assessments are summarised in their temporal sequence in Appendix 2.
- 41. The schedule for thematic assessments after 2009 will be settled in 2010. References to the "programme period" therefore apply to the period up to 2010. Unless otherwise specified, the target year for assessments indicates the year in which they should be ready for submission to the OSPAR Commission.

- 42. To provide an intermediate reference point, an overview of OSPAR assessment work in the period 1998 2005 will be produced in 2006.
- 43. For the **Strategy on the protection and conservation of the ecosystems and biological diversity of the maritime area**, there will be:
 - a. a series of assessments of human activities that impact significantly on the marine environment; the purpose of these will be to provide the basis for decisions whether, on the criteria in Appendix 3 of the Convention, the human activity in question should be identified for the development of programmes and measures; since there are a number of activities to be assessed, two or three will be assessed each year;
 - b. an assessment of the conservation status of the species and habitats on the OSPAR list of threatened and/or declining species and habitats, to provide a basis for decisions on progress and priorities protecting them; this will be done in 2006 with a further assessment in 2009.
- 44. For the *Strategy to combat eutrophication*, there needs to be an ongoing review of the changes in the eutrophication status of the different parts of the OSPAR maritime area, initially using the assessment criteria in the Common procedure for the identification of the eutrophication status of the maritime area (Common Procedure) and subsequently against the agreed ecological quality objectives for nutrients and eutrophication effects and any intermediate targets. Assessments of the eutrophication status expected after the implementation of agreed measures will also be needed. There will therefore be:
 - a. assessments in 2006 to identify reductions in nutrient inputs and the expected eutrophication status of all parts of the OSPAR maritime area;
 - b. an assessment in 2007 to look at the different areas in accordance with paragraph $3.2(b)^{54}$ of the Strategy to combat eutrophication.
- 45. For the **Strategy with regard to hazardous substances**, there needs to be both reviews of what is happening on the various chemicals identified for priority action, including assessments of changes in environmental concentrations against agreed background reference concentrations and ecotoxicological assessment criteria, and a wider-ranging consideration of the biological effects of hazardous substances in general. There will therefore be:
 - a. a programme for assessing the presence in the environment of chemicals identified for priority action;
 - b. an initial assessment in 2005 of the biological effects of hazardous substances in the OSPAR maritime area, and a more elaborated one in 2009.
- 46. For the *Strategy on environmental goals and management mechanisms for offshore activities*, there is a need to set up or improve information collection systems, to provide the basis for common assessments of progress towards the environmental goals that have been set. These will be brought together in an assessment in 2009 to address the full range of goals that have been established and the overall impact of offshore oil and gas activities on the marine environment. In the interim, there will be an assessment in 2007, to review the information collected under the Guidelines on monitoring the environmental impact of offshore oil and gas activities.
- 47. For the **Strategy with regard to radioactive substances**, there is a need to assess the sources, trends, and distribution of, exposure to, and significance of radioactive substances, particularly against the baseline to be agreed. There will be regional assessments in 2006, 2007 and 2008, to be followed by an overall assessment in 2009.

SECTION III – THE THEMES AND THE TARGET OUTPUT

48. This section is divided between six themes: one covering the general quality status of the OSPAR maritime area and other general issues, and five covering the fields of the five OSPAR Strategies - biodiversity (including issues relating to Annex II to the OSPAR Convention),

This paragraph provides that there should be urgent implementation of monitoring and research in order to enable a full assessment of the eutrophication status of each area concerned within five years of its being characterised as a potential problem area with regard to eutrophication.

eutrophication, hazardous substances, offshore activities and radioactive substances. Paragraphs 33 to 38 above set out how this programme of work is to be managed by the Environmental Assessment and Monitoring Committee (ASMO) in close collaboration with the other Strategy Committees and, as necessary, with other organisations.

- 49. Under each theme, the main issues are set out as **starting points**, followed by the **tools**, **information collection** (including monitoring) and the planned **assessments** that need to be developed to respond to those issues. Since the JAMP will continue to build on past achievements, the tools and information collection already in place are also noted. "Tools" are taken to be agreements on how to carry out some process; "information collection" to be the processes of acquiring information of all kinds; and "assessment" the processes of interpreting that information (the complete schedule of assessment products to be prepared under the JAMP is given at Appendix 2). In describing information requirements in the broad sense, a distinction is made between "monitoring" in the narrow sense (specific programmes setting out to capture data that would not otherwise be collected) and "reporting" (arrangements to make available information which is being collected for some other purpose usually management or regulation of an activity).
- 50. The tools developed, the data collected and the assessments prepared under each theme will be made available as contributions to other international assessment activities at European and global level. Arrangements will be made from time to time in line with the assessment plans of other international organisations to bring together and disseminate the relevant products. Over the programme period, OSPAR will also communicate the outcome of its JAMP activities through official publications, some of which may be targeted at specific audiences.

THEME A: GENERAL

Starting points

- 51. Annex IV of the OSPAR Convention embraces all aspects of the health of the marine environment. To fulfil the requirements of Annex IV, some broad guestions must be answered:
 - a. What is the overall quality status of the OSPAR maritime area, and is it changing?
 - b. How can we distinguish between anthropogenic effects and natural background variations in the marine environment, its biological communities and production?
 - c. What changes in the OSPAR maritime area can be attributed to long-term climate change?
 - d. What are the future threats to the marine environment and can improvements be made to our ability to foresee them?
 - e. How can ecosystem health be assessed in order to determine the extent of human impact?
- 52. Work under this theme is therefore concerned with integrating the work under the other themes into a wider perspective, alongside more general studies of the seas that are being done in other programmes, both within OSPAR and elsewhere. It will draw on a wide range of sources, but will not itself generate specific major programmes for generating information. This theme will also cover the work needed to ensure the overall coherence, consistency and comprehensiveness of this programme, with a view to maintaining scientific standards.

Tools

- 53. Over the programme period, the following tools will be prepared:
- AT-1 JAMP Guidelines by 2004 for the selection of data for use in assessments;
- AT-2 JAMP Guidelines by 2004 for the assessment of trends in environmental monitoring data;
- AT-3 JAMP Guidelines by 2006 for determining the frequency of monitoring, and for the selection of monitoring locations in order to secure an adequate geographical coverage, taking into account the resources available, for parameters that are or will be monitored under the JAMP;

- AT-4 Arrangements for data-handling, revised where necessary by 2006 to ensure consistency, efficiency and effectiveness both within OSPAR and with other international organisations;
- AT-5 Methods by 2007 needed to assess the implications of climatic change for the OSPAR maritime area.

Information collection

- 54. Information will be available through the data collection activities and the thematic assessments specific to each of the Strategy areas. Data will also be available from the following general OSPAR programmes:
 - the Co-ordinated environmental monitoring programme (CEMP) provides the framework to coordinate national marine monitoring programmes that are collecting information on a range of variables. It includes the Nutrient monitoring programme;
 - b. the Comprehensive study on riverine inputs and direct discharges (RID) provides annual data on the waterborne inputs of selected substances to the marine environment; RID started in 1990;
 - c. the Comprehensive atmospheric monitoring programme (CAMP) collects data on atmospheric contaminants from a network of coastal stations in order to study atmospheric inputs. CAMP started in 1987.
- 55. Other data and information will be obtained from relevant national and international monitoring programmes and assessment activities, including:
 - a. the International Council for the Exploration of the Sea (ICES);
 - b. the European Environment Agency (EEA);
 - c. the monitoring work under the UN ECE Convention on the Long-Range Transport of Air Pollution (LRTAP);
 - d. the Arctic Environmental Monitoring and Assessment Programme (AMAP) especially for the parts of the OSPAR maritime area in the Arctic;
 - e. national environmental monitoring programmes, especially those elements addressing monitoring requirements of relevant EC Directives;
 - f. Bonn Agreement data on oil and other pollution from shipping;
 - g. the Global Oceans Observation System (GOOS);
 - h the monitoring work under the UNEP POP Convention;
 - i. remote sensing and ships –of opportunity programmes;
 - j. assessments by the Intergovernmental Panel on Climate Change (IPCC) and the Arctic Climate Impact Assessment (ACIA).

Assessments

- 56. Over the programme period the following assessments will be produced:
- AA-1 By 2006, an overview of OSPAR assessment work 1998 2006;
- AA-2 An assessment in 2010 of the quality status of the OSPAR maritime area and of its sub-regions.
- 57. These assessments, and the thematic assessments under the Themes B, E, H, O and R, will also contribute to assessments at European and global level.

THEME B: BIOLOGICAL DIVERSITY AND ECOSYSTEMS

Starting points

58. Annexes II and V of the OSPAR Convention and the Strategy on the protection and conservation of the ecosystems and biological diversity of the maritime area provide the basis for this part of the programme. Although the focus has to be largely on individual human activities, the effect on the marine ecosystems can only be considered as a whole, and this must be borne in mind in all assessment and monitoring work. The following issues will be addressed:

- a. What human activities occur, what is their extent, intensity and duration, and are they changing?
- b. What are the distributions of species and habitats and what is the ecosystem structure and function. Are they changing? What impacts are there on species and habitats, and are they changing?
 - i. How can ecosystem health be assessed in order to determine the extent of human impact?
 - ii. Which species and habitats are threatened and/or subject to rapid decline?
- c. How far can effects on biological diversity or marine species and habitats be linked, wholly or partly, to a specific cause, and can these causes in turn be linked to individual, or combinations of, human activities (including those not already being assessed under the JAMP)?
- d. What human activities adversely affect specific species, communities and habitats, or specific ecological processes which are of concern because they are threatened and/or subject to rapid decline?
- 59. More specific issues arise for particular human activities. These activities are set out in Appendix 3.

Tools

- 60. The tools that are available or under development include:
 - a. Criteria for the selection of threatened and/or declining species and habitats (in accordance with paragraph 2.2(b) of the OSPAR Strategy on the protection and conservation of the ecosystems and biological diversity of the maritime area);
 - b. The OSPAR List of threatened and/or declining species and habitats;
 - c. The EUNIS marine classification system (under further joint development between EEA, ICES and OSPAR);
 - d. JAMP Guidelines on quality assurance for biological monitoring;
 - e. Hydrodynamic models;
 - f. Guidelines for quality assurance of analytical methods for estimating substances in dredged material.
- 61. Over the programme period, the following further tools will be prepared:

In relation to species and habitats

- BT-1 Ecological quality objectives, initially as part of the pilot project for the North Sea;
- BT-2 Operational EUNIS classification at the level required for mapping and assessment;
- BT-3 JAMP Guidelines for monitoring:
 - a. progress towards individual ecological quality objectives (these will be particularly relevant to BM-3(a));
 - b. changes over time in species and habitats on the OSPAR List of threatened and/or declining species and habitats (these will be particularly relevant to BM-3(b)).

In relation to human activities

BT-4 JAMP Guidelines for reporting changes in the level and nature of the human activities listed in Appendix 3 (these will be particularly relevant to BM-4);

Within this series, work has already been programmed on:

BT-4.1 Harmonised procedures for surveys of beach litter (together with any further monitoring tools needed for this subject).

Information collection

62. In addition to the general sources of information mentioned in paragraphs 54 and 55, the available sources of information include:

- a. an inventory of marine protected areas (MPAs);
- b. ICES fisheries databases;
- c. OSPAR annual reporting on dumping of wastes at sea (mainly of dredged materials), an OSPAR reporting system for dumping operations at sea;
- d. a database on windmill farms;
- e. the inventory of dumped munitions;
- f. ICES reporting system for sand and gravel extraction.
- 63. Over the programme period, the following additional products will be prepared or implemented:

In relation to species and habitats

- BM-1 GIS-based habitat maps for the OSPAR maritime area; these could be improved in further information collection, which could start with a one-off survey;
- BM-2 Appropriate systems for collecting data/information on non-indigenous species;
- BM-3 Monitoring arrangements for the parameters required to assess:
 - a. progress towards achieving agreed ecological quality objectives;
 - b. changes in species and types of habitats on the OSPAR List of threatened and/or declining species and habitats.

In relation to human activities

BM-4 Monitoring/reporting systems for human activities listed in Appendix 3 where assessments under BA-4 have concluded that observation of those activities is justified;

Within this series, work is already programmed on:

- BM-4.1 An information section for a Background Document on the impacts of tourism (if that Background Document justifies the need, further information collection may be necessary);
- BM-4.2 Periodically updated information on the presence of dumped chemical munitions;
- BM-4.3 A monitoring programme for litter based on the experience of the pilot project.

Assessments

64. Over the programme period the following assessments will be produced, culminating in the general assessment of the quality status of the OSPAR maritime area and its sub-regions:

In relation to species and habitats

- BA-1 An assessment in 2005 of the pilot project on ecological quality objectives for the North Sea;
- BA-2 An assessment in 2006 of the status of the species and types of habitats that have been placed on the OSPAR List of threatened and/or declining species and habitats⁵⁵, on the basis of the application of the relevant selection criteria;
- BA-3 An assessment in 2006 of the changes in the distribution and abundance of marine species in relation to changes in hydrodynamics and sea temperature;
- BA-4 A further assessment in 2009 of the status of the species and habitats that have been placed on the OSPAR List of threatened and/or declining species and habitats, in the light both of the relevant selection criteria and relevant agreed ecological quality objectives.

This list is subject to further and continuous review against the agreed Texel-Faial Criteria for the selection of threatened and/or declining species and habitats.

In relation to human activities

- BA-5 A series of assessments for the human activities listed in Appendix 3;
 - Within these series, the following are already programmed:
 - BA-5.1 A further assessment of impact of fisheries, including the environmental effects of new fisheries management actions and deep sea fisheries;
 - BA-5.2 An assessment section for a Background Document on dredging;
 - BA-5.3 An assessment section for a Background Document on mariculture; amongst other things, this would provide better documentation of the effect of escaped stock on the genetic composition of wild stocks, and of the risk of spread of diseases from mariculture to wild stocks and vice versa:
 - BA-5.4 A first assessment report on trends in quantities of different types of litter and sources of litter;
- BA-6 A trend analysis in 2007 of all the different human activities listed in Appendix 3 and their collective impact on the OSPAR maritime area.

THEME E: EUTROPHICATION

Starting points

- 65. The Strategy to combat eutrophication and the Common procedure for the identification of the eutrophication status of the maritime area (Common Procedure) provide the basis for this part of the programme. The overall objective is the achievement in 2010 of a healthy marine environment where eutrophication does not occur. In the programme period, the progress made towards achieving this overall objective will be evaluated.
- 66. Therefore, the following issues will be addressed:
 - a. The main anthropogenic sources of nutrients are e.g. agriculture, sewage, aquaculture, industry, transport, energy production and consumption. What are the levels of discharges, emissions and losses from such sources, and what are the pathways to the marine environment?
 - b. Are these anthropogenic sources of nutrients and/or the associated inputs changing in nature, timescale or magnitude and what are the implications for achieving the target of a healthy marine environment where eutrophication does not occur?
 - c. What is the eutrophication status of the different parts of the OSPAR maritime area, i.e. what are the problem areas, the potential problem areas and the non-problem areas with respect to eutrophication? What are the developments in such problem areas and potential problem areas of the factors covered by the Comprehensive Procedure of the Common Procedure?

Tools

- 67. The tools that are available or under development include:
 - a. monitoring guidelines, quality assurance (QA) and reporting procedures for CAMP,
 CEMP (including Nutrient monitoring programme), RID;
 - b. Guidelines on harmonised quantification and reporting procedures for nutrients (HARP-NUT);
 - c. the Common Procedure and the harmonised assessment criteria, their respective assessment levels and classification within the Comprehensive Procedure;
 - d. models:
 - e. JAMP Guidelines on quality assurance for biological monitoring);
 - PARCOM Guidelines for the calculation of mineral balances.
- 68. Over the programme period, the following further tools will be prepared:
- ET-1 JAMP Guidelines by 2004 on monitoring frequency and spatial coverage for nutrients and eutrophication parameters (≡ part of AT-3);

- ET-2 A revision as necessary of existing JAMP guidelines and development of new guidelines where they do not already exist, by 2004, to enable monitoring of progress towards individual ecological quality objectives for nutrients and eutrophication effects;
- ET-3 A future development by 2004 of the HARP-NUT guidelines on harmonised quantification and reporting procedures for nutrients;
- ET-4 A further development where required by 2005 of ecological quality objectives for nutrients and eutrophication effects;
- ET-5 Further developed harmonised assessment criteria by 2006, together with their respective assessment levels and classification within the Comprehensive Procedure of the Common Procedure:
- ET-6 JAMP Guidelines by 2006 for the integrated assessment of emissions, discharges, losses and inputs to, and concentrations and effects in, the marine environment (=HT-6);
- ET-7 An overview by 2006 of predictive models for eutrophication assessment and nutrient reduction scenarios; including transboundary fluxes within the OSPAR maritime area, and of the possibilities of adopting relevant models for use by OSPAR Contracting Parties;
- ET-8 A future development by 2006 of the HARP-NUT guidelines on harmonised quantification and reporting procedures for nutrients.

Information collection

- 69. In addition to the general sources of information mentioned in paragraphs 54 and 55, the available sources of information include information collected under the HARP-NUT guidelines to facilitate, amongst other things, reporting on progress towards achieving the 50% reduction in nutrient inputs when producing implementation reports on PARCOM Recommendation 88/2.
- 70. Over the programme period, the following additional products will be implemented:
- EM-1 A collection of information in 2004 on emissions to air and atmospheric deposition (via EMEP, EPER);
- EM-2 Coherent arrangements by 2004 for the collection of monitoring results required to assess progress towards achieving agreed ecological quality objectives for nutrients and eutrophication effects;
- EM-3 A collection of information in 2006 on emissions to air and atmospheric deposition (via EMEP, EPER);
- EM-4 A collection of information in 2008 on emissions to air and atmospheric deposition (via EMEP, EPER).

Assessments

- 71. Over the programme period the following assessments will be produced, culminating in the general assessment of the quality status of the OSPAR maritime area and its sub-regions:
- EA-1 Assessments by 2004 of atmospheric emissions and modelled depositions of nutrients;
- EA-2 Assessments by 2005 of temporal trends and (where relevant/possible) spatial distribution for the nutrients where periodic sampling and analysis is undertaken, in particular under CAMP, CEMP and RID;
- EA-3 An assessment by 2005 of the pilot project on ecological quality objectives for the North Sea:
- EA-4 An assessment in 2006 of the achievement of the 50% reduction target using information obtained through implementation reporting on PARCOM Recommendations 88/2 and 89/4;
- EA-5 An assessment in 2006 of the expected eutrophication status of the OSPAR maritime area following the implementation of agreed measures;

EA-6 An assessment in 2007 of the eutrophication status of areas identified under the Common Procedure as problem areas and potential problem areas, and of any non problem areas where there have been changes which give grounds for concern.

THEME H: HAZARDOUS SUBSTANCES

Starting points

- 72. The Strategy with regard to hazardous substances provides the basis for this part of the programme. It operates at two levels: chemicals for priority action, and hazardous substances in general. The following issues will be addressed:
 - a. What are the concentrations in the marine environment, and the effects, of the substances on the OSPAR List of chemicals for priority action ("priority chemicals")?⁵⁶ Are they at, or approaching, background levels for naturally occurring substances and close to zero for man made substances?
 - b. For the individual OSPAR chemicals for priority action, what are the sources, what are the levels of discharges, emissions and losses, and what are the pathways to the marine environment? Are the discharges, emissions and losses from sources of these substances to the marine environment continuously decreasing, and are they moving towards the target of cessation by 2020?
 - c. Are there any problems emerging related to the presence of hazardous substances in the marine environment? In particular, are any unintended/unacceptable biological responses, or unintended/unacceptable levels of such responses, being caused by exposure to hazardous substances?

Tools

73. The tools that are available or under development include:

- a. monitoring guidelines and reporting procedures for CAMP, CEMP and RID;
- b. background/reference concentrations (BRCs) and ecotoxicological assessment criteria (EACs);
- c. the EC/OSPAR marine risk assessment methodology;
- d. models on the transport and fate of pollutants, and models of dispersion of accidental chemical spills.
- 74. Over the programme period, the following further tools will be prepared:
- HT-1 A guidance by 2003 on a common framework for the establishment of monitoring strategies for each of the substances (or group of substances) on the OSPAR List of chemicals for priority action ⁵⁷;
- HT-2 Monitoring strategies by 2004⁵⁸ for each of the substances (or group of substances) on the OSPAR List of chemicals for priority action;
- HT-3 Assessment tools by 2005⁵⁹ for pursuing the monitoring strategies for substances (or groups of substances) on the OSPAR List of chemicals for priority action. Such assessment tools will include updating of existing background/reference concentrations (BRCs) and ecotoxicological assessment criteria (EACs). They will also be consistent with equivalent tools (such as environmental quality standards) developed within the framework of other international organisations and similar systems dealing with the same substances;

The OSPAR List of chemicals for priority action can be found at www.ospar.org, under measures (Agreement ref. 2002-18).

This guidance could also be used to support work carried out for the purpose of the selection and prioritisation of substances of concern (DYNAMEC) as and when future exercises of that kind are carried out.

Or, as appropriate, one year after the adoption by the Commission of an OSPAR Background Document on a priority substance.

Or, as appropriate, one year after the adoption by the Commission of a monitoring strategy for priority substances that identifies the need to establish an assessment tool.

- HT-4 JAMP Guidelines by 2006 for pursuing the monitoring strategies for substances (or groups of substances) on the OSPAR List of chemicals for priority action;
- HT-5 A review of the JAMP Guidelines by 2006 on biological effects monitoring and the integration with chemical monitoring;
- HT-6 Development by 2006 of JAMP Guidelines for the integrated assessment of emissions, discharges, losses and inputs to, and concentrations and effects in, the marine environment (=ET-6).

Information collection

- 75. In addition to the general sources of information mentioned in paragraphs 54 and 55, the available sources of information include:
 - a. the regular OSPAR Reports on the chlor alkali industry, the offshore industry, and the dumping of dredged material (and, to the extent that it occurs, other wastes);
 - b. the European Pollutant Emission Register⁶⁰;
 - c. the UN-ECE Pollutant Release and Transfer Register⁶¹;
 - d. the progress report to the 5th North Sea Ministerial Conference and the underlying data collected via the HARP-HAZ system.
- 76. The existing OSPAR reporting systems will be modified to the extent that this is necessary as a result of the monitoring strategies adopted for the substances on the OSPAR List of chemicals for priority action. To ensure collection of comparable and useful data on emissions, discharges and losses, it is important to establish harmonised procedures for the reporting of data.
- 77. Over the programme period, the following additional products will be implemented:
- HM-1 A series of information collection systems by 2005⁶² that implement the monitoring strategies in respect of the priority chemicals (or groups of priority chemicals);
- HM-2 An information collection system by 2005 on results of biological effects monitoring in areas where such effects may occur because of the potential levels of contamination;
- HM-3 When appropriate, identification of the likely impacts on the marine environment of substances recorded, *inter alia*, in source inventories, or identified by screening methods.

Assessments

- 78. Over the programme period the following assessments will be produced, culminating in the general assessment of the quality status of the OSPAR maritime area and its sub-regions:
- HA-1 An assessment by 2005 of temporal trends and (where relevant/feasible) spatial distribution for the hazardous substances where periodic sampling and analysis is undertaken, in particular under CAMP, CEMP and RID;
- HA-2 An initial assessment by 2005 of biological effects of hazardous substances in the maritime area;
- HA-3 An assessment every 5 years of emissions, discharges and losses of chemicals identified for priority action. The first assessment will be finalised by 2008;
- HA-4 A more elaborated assessment by 2009 of biological effects of hazardous substances in the maritime area;
- HA-5 An assessment by 2009 of temporal trends and (where relevant/feasible) spatial distribution for the hazardous substances where periodic sampling and analysis is undertaken, in particular under CAMP, CEMP and RID;

See http://europa.eu.int/comm/environment/ippc/eper.htm.

Under development in the context of the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention), see http://www.unece.org/env/pp/prtr.htm.

Or as soon as practical after the adoption of the monitoring strategy.

HA-6 A general assessment by 2009 of the development in the quality status of the maritime area in relation to hazardous substances that should take into account the results of the assessments under HA-1 and HA-5, HA-2 and HA-4 and HA-3, and the results of any screening of levels of substances in the marine environment covered by HM-3.

THEME O: OFFSHORE ACTIVITIES

Starting points

- 79. The Strategy on environmental goals and management mechanisms for offshore activities provides the basis for this part of the programme. The following issues will be addressed:
 - a. what activities of the offshore oil and gas industry may impact the marine environment and how are those activities changing?
 - b. what are the inputs of hydrocarbons and hazardous materials from offshore installations to the sea, and are they changing?
 - c. what are the concentrations of hydrocarbons and hazardous materials in environmental compartments focusing on areas influenced by offshore installations and are they changing?
 - d. what are the biological effects (on benthic communities, demersal and pelagic organisms, marine mammals and seabirds) and are they changing?

Tools

- 80. The tools that are available or under development include:
 - a. the OSPAR Guidelines for monitoring the environmental impact of offshore oil and gas activities;
 - b. models on the transport and fate of pollutants, and models of dispersion of accidental chemical spills;
 - c. a harmonised reporting system to compile the information collected by Contracting Parties on the basis of existing reporting formats for the submission of data for the annual OSPAR Report on discharges, waste handling and air emissions from offshore installations and through reporting formats for the regular submission of national reports on the implementation of OSPAR Decision 2000/2 and OSPAR Recommendations 2000/4 and 2000/5 (chemicals used and discharged), OSPAR Decision 2000/3 (organic phased drilling fluids (OPF) and OPF contaminated cutting) and OSPAR Recommendation 2001/1 (oil in produced waters).
- 81. Over the programme period, the following further tools will be prepared:
- OT-1 Technical annexes to the Guidelines for monitoring the environmental impact of offshore oil and gas activities by 2004 covering the water column and other issues such as noise if deemed necessary;
- OT-2 An agreed reference method by 2004 for the determination of dispersed oil content in produced water;
- OT-3 A harmonised reporting system by 2004 to compile environmental monitoring data and information related to offshore oil and gas activities;
- OT-4 An agreed reference method by 2005 for the determination of the content of aromatic hydrocarbons in produced water;
- OT-5 Assessment tools by 2006 for the impact of hydrocarbons and chemicals from offshore installations.

Information collection

82. The principal existing information and data reporting system is the compilation and assessment of the information collected by the relevant Contracting Parties in accordance with the Guidelines on reporting discharges, waste handling and air emissions from offshore installations. In addition, information is being collected on the levels of contaminants in cuttings piles and their impact on the surrounding environment.

- 83. Over the programme period, this will be supplemented by:
- OM-1 Information collection through a harmonised reporting system by 2006 to compile environmental monitoring data and information related to offshore oil and gas activities:
- OM-2 Information collection through a harmonised reporting system by 2006 to compile the information collected by Contracting Parties on discharges of hydrocarbons from offshore installations (including major accidental losses of oil) and on chemicals discharged offshore.

Assessments

- 84. Over the programme period the following assessments will be produced, culminating in the general assessment of the quality status of the OSPAR maritime area and its sub-regions:
- OA-1 An assessment by 2007 of the impact on the marine environment of offshore oil and gas activities;
- OA-2 An assessment by 2007 of the possible effects of releases of oil and chemicals from any disturbance of cutting piles;
- OA-3 An assessment by 2009 of the extent and impact of the offshore oil and gas industry, including the impacts on the marine environment of discharges of hydrocarbons and controlled offshore chemicals, both as they occur and from subsequent remobilization, together with an assessment of the significance for the marine environment of such impacts in relation to the natural changes which are occurring to the OSPAR maritime area.

THEME R: RADIOACTIVE SUBSTANCES

Starting points

- 85. The Strategy with regard to radioactive substances provides the basis for this part of the programme. The following issues will be addressed:
 - a. what are the anthropogenic sources of radionuclides, and are they changing?
 - b. what are the discharges, emissions and losses of radioactive substances from the nuclear and non nuclear sectors, and what are their temporal trends?
 - c. what are the concentrations of radioactivity in environmental compartments, and are they changing?
 - d. what are the biological effects of radioactivity, and are they changing?
- 86. Apart from the collection of information on liquid discharges of radioactive substances from nuclear installations, there are at present no OSPAR monitoring programmes that provide data specifically for this section of the programme.

Tools

- 87. The available tools are, in effect, the methodology used for assessing radiological dose and marine transport models for radionuclides.
- 88. Over the programme period, the following further tools will be prepared:
- RT-1 Baseline by 2003 for:
 - discharges of radioactive substances;
 - their concentrations in the marine environment;
 - resultant doses to members of the public;
- RT-2 Harmonised reporting procedures by 2004 for liquid discharges of radioactive substances from nuclear installations;
- RT-3 Harmonised reporting procedures by 2004 for inputs of radioactive substances from the non nuclear sector;
- RT-4 Monitoring guidelines by 2004 for radionuclides in the marine environment;

RT-5 Environmental quality criteria for radioactive substances by 2007.

Information collection

- 89. The available sources of information and data reporting systems (with their own underlying tools) that contribute to this section of the programme include:
 - regular compilations by an expert panel of annual data on liquid discharges of radioactive substances from nuclear installations, including trend assessments;
 - b. the EC MARINA II Study.
- 90. Over the programme period, the following additional products will be prepared:
- RM-1 A monitoring programme by 2004 for concentrations of radioactive substances in the marine environment;
- RM-2 Structured reporting by Contracting Parties by 2005 for the first time of relevant monitoring data⁶³;
- RM-3 A monitoring programme by 2005 for inputs of radioactive substances from the nonnuclear sector.

Assessments

- 91. Over the programme period the following assessments will be produced, culminating in the general assessment of the quality status of the OSPAR maritime area and its sub-regions:
- RA-1 Assessments, for those regions where sufficient information is available, of the status of the marine environment in respect of radioactivity. Such assessments will cover:
 - by 2006, the sources of discharges, emissions and losses of radioactive substances to the marine environment, including human activities that have been, are, or might become sources and other potential sources such as the remobilization of past deposits;
 - b. by 2007, the exposure of humans to radiation from pathways involving the marine environment:
 - c. if sufficient information is available, by 2008, the impact on marine biota of anthropogenic sources (past, present and potential) of radioactive substances;
 - d. if sufficient information is available by 2008, the temporal trends and spatial distribution of concentrations of radionuclides, and their fate in the marine environment;
- RA-2 An overall assessment of radionuclides in the maritime area by 2009, covering the points to be covered by RA-1.

Linked to the proposals for assessment and monitoring included in, or associated with, national plans for achieving the objective of the Strategy, in the context of the Programme for a More Detailed Implementation of the Strategy with regard to Radioactive Substances (reference number: 2001-3).

DESCRIPTION OF THE REGIONS OF THE OSPAR MARITIME AREA

The OSPAR maritime area covers:

- a. those parts of the Atlantic and Arctic Oceans and their dependent seas which lie north of 36° North and between 42° West and 51° East, but excluding:
 - (i) the Baltic Sea and the Belts lying to the south and east of lines drawn from Hasenore Head to Gniben Point, from Korshage to Spodsbjerg and from Gilbjerg Head to Kullen,
 - (ii) the Mediterranean Sea and its dependent seas as far as the point of intersection of the parallel of 36° North and the meridian of 5° 36' West;
- that part of the Atlantic Ocean north of 59° North and between 44° West and 42° West.

For the purposes of assessment the OSPAR maritime area has been divided into five sub-regions:

Region I: Arctic Waters

The region of the North-East Atlantic covered by AMAP from south of Greenland via Iceland, including the Faroes and along 62° North to the Norwegian coast.

Region II: Greater North Sea

As defined for the purposes of the North Sea Conferences (but extended to cover the Kattegat) i.e.:

- a. southwards of 62° North and eastwards of 5 °West, at the north-west side;
- b. in the Kattegat, northwards of the line from Hasenore Head (DK) to Gniben Point (DK), and from Gilbjerg Head (DK) to Kullen (S);
- c. eastwards of 5° West and northwards of 48° North, at the south side.

Region III: Celtic Seas

Western boundary: following the 200 m depth contour to the west of 6° West along the western coasts of Scotland and Ireland from 60° North to 48° North.

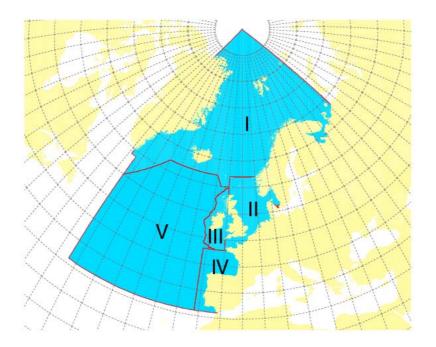
Eastern boundary: 5° West and the west coast of Great Britain from 60° North to 48° North.

Region IV: Bay of Biscay and Iberian Coast

The region to the south of 48° North, to the east of 11° West and to the southern limit of the maritime area.

Region V: Wider Atlantic

The region to the south of Region I, to the west of Regions II, III and IV and to the western and southern limits of the maritime area.



ASSESSMENT SCHEDULE

2003

BA-5 First assessments on human activities listed in Appendix 3 – miscellaneous offshore structures and installations, offshore wind-energy farms, sand and gravel extraction and tourism.

2004

- BA-5 At least one further assessment in the series of assessments for the human activities listed in Appendix 3.
- EA-1 Assessments of atmospheric emissions and modelled depositions of nutrients.

2005

- BA-1 An assessment of the pilot project on ecological quality objectives for the North Sea, and
- BA-5 Two of the series of assessments for the human activities listed in Appendix 3.
- EA-2 Assessments of temporal trends and (where relevant/possible) spatial distribution for the nutrients where periodic sampling and analysis is undertaken, in particular under CAMP, CEMP and RID.
- EA-3 An assessment of the pilot project on ecological quality objectives for the North Sea.
- HA-1 An assessment of temporal trends and (where relevant/feasible) spatial distribution for the hazardous substances where periodic sampling and analysis is undertaken, in particular under CAMP, CEMP and RID.
- HA-2 An initial assessment of biological effects of hazardous substances in the maritime area.

2006

- AA-1 An overview of OSPAR assessment work 1998 2006.
- BA-2 An assessment of the status of the species and types of habitats that have been placed on the OSPAR List of threatened and/or declining species and habitats, on the basis of the application of the relevant selection criteria.
- BA-3 An assessment of the changes in the distribution and abundance of marine species in relation to changes in hydrodynamics and sea temperature.
- BA-5 One of the series of assessments for the human activities listed in Appendix 3.
- EA-4 An assessment of the achievement of the 50% reduction target using information obtained through implementation reporting on PARCOM Recommendations 88/2 and 89/4.
- EA-5 An assessment of the expected eutrophication status of the OSPAR maritime area following the implementation of agreed measures.
- RA-1a An assessment (for those regions where information is available) of the sources of discharges, emissions and losses of radioactive substances to the marine environment.

2007

- BA-5 Two of the series of assessments for the human activities listed in Appendix 3.
- BA-6 A trend analysis of all the different human activities listed in Appendix 3 and their collective impact on the OSPAR maritime area.

- EA-6 An assessment of the eutrophication status of areas identified under the Common Procedure as problem areas and potential problem areas, and of any non-problem areas where there have been changes which give grounds for concern.
- OA-1 An assessment of the impact on the marine environment of offshore oil and gas activities.
- OA-2 An assessment of the possible effects of releases of oil and chemicals from any disturbance of cutting piles.
- RA-1b An assessment (for those regions where information is available) of the exposure of humans to radiation from pathways involving the marine environment.

2008

- BA-5 Two of the series of assessments for the human activities listed in Appendix 3.
- HA-3 The first 5-yearly assessment of emissions, discharges and losses of chemicals identified for priority action.
- RA-1c An assessment (for those regions where information is available) of the impact on marine biota of anthropogenic sources (past, present and potential) of radioactive substances.
- RA-1d An assessment (for those regions where information is available) (if possible) of the temporal trends and spatial distribution of concentrations of radionuclides and their fate in the marine environment.

2009

- BA-4 A further assessment of the status of the species and habitats that have been placed on the OSPAR List of threatened and/or declining species and habitats, in the light both of the relevant selection criteria and relevant agreed ecological quality objectives.
- HA-4 A more elaborated assessment of biological effects of hazardous substances in the maritime area.
- HA-5 An assessment of temporal trends and (where relevant/feasible) spatial distribution for the hazardous substances where periodic sampling and analysis is undertaken under RID, CAMP and CEMP.
- HA-6 A general assessment of the development in the quality status of the maritime area in relation to hazardous substances that should take into account the results of the assessments under HA-1 and HA-5, HA-2 and HA-4, and HA-3, and the results of any screening of levels of substances in the marine environment covered by HM-3.
- OA-3 An assessment of the extent and impact of offshore oil and gas activities, including the impacts on the marine environment of discharges of hydrocarbons and controlled offshore chemicals, both as they occur and from subsequent remobilization, together with an assessment of the significance for the marine environment of such impacts in relation to the natural changes which are occurring to the OSPAR maritime area.
- RA-2 An overall assessment of radionuclides in the OSPAR maritime area.

2010

AA-2 An assessment of the quality status of the OSPAR maritime area and of its subregions.

HUMAN ACTIVITIES IN THE MARINE ENVIRONMENT

- 1. Sand and gravel extraction
- 2. Dredging for navigational purposes, other than within harbours, together with the associated dumping of dredged materials
- 3. Exploration for oil, gas and solid minerals
- 4a. Placement of structures for the exploitation of oil and gas
- 4b. Placement of cables and pipelines (Any assessment of this activity will include an assessment of the scope for action under other international law)
- 5a. Construction or placement of artificial islands
- 5b. Construction or placement of artificial reefs
- 5c. Installations and structures offshore windmill farms
- 6a. Land reclamation
- 6b. Coastal defence
- 7. Tourism
- 8. Recreational activities (these activities will be examined with the aim of identifying whether specific activities within this group would require a further assessment)
- 9. Mariculture
- 10. Fisheries⁶⁴
- 11. Maritime transportation⁶⁵

See OSPAR Convention Annex V Article 4(1) on questions relating to the management of fisheries.

See OSPAR Convention Annex V Article 4(2) on guestions concerning maritime transportation.

Annex 8

Convention for the Protection of the Marine Environment of the North-east Atlantic

The Convention for the Protection of the Marine Environment of the North-East Atlantic was opened for signature at the Ministerial Meeting of the Oslo and Paris Commissions, Paris, 21-22 September 1992.

The Convention has been signed by all Contracting Parties to the Oslo Convention and to the Paris Convention (Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, the Netherlands, Norway, Portugal, Spain, Sweden and the United Kingdom of Great Britain and Northern Ireland), Luxembourg, Switzerland and the Commission of the European Communities.

The signatures on behalf of Denmark and the United Kingdom of Great Britain and Northern Ireland were accompanied by declarations, the text of which are also attached (see footnotes 69 and 70).

After the ratification by all above-mentioned States and the European Community, the Convention entered into force on 25 March 1998. The Ministerial Meeting of the OSPAR Commission, Sintra, 22-23 July 1998 adopted a new Annex V on the Protection and Conservation of the Ecosystems and Biological Diversity of the Maritime Area and a new Appendix 3: Criteria for Identifying Human Activities for the Purpose of Annex V (see footnotes 67 and 68).

The integral text of the Convention is attached.

CONVENTION FOR THE PROTECTION OF THE MARINE ENVIRONMENT OF THE NORTH-EAST ATLANTIC

THE CONTRACTING PARTIES,

RECOGNISING that the marine environment and the fauna and flora which it supports are of vital importance to all nations;

RECOGNISING the inherent worth of the marine environment of the North-East Atlantic and the necessity for providing coordinated protection for it;

RECOGNISING that concerted action at national, regional and global levels is essential to prevent and eliminate marine pollution and to achieve sustainable management of the maritime area, that is, the management of human activities in such a manner that the marine ecosystem will continue to sustain the legitimate uses of the sea and will continue to meet the needs of present and future generations;

MINDFUL that the ecological equilibrium and the legitimate uses of the sea are threatened by pollution;

CONSIDERING the recommendations of the United Nations Conference on the Human Environment, held in Stockholm in June 1972:

CONSIDERING also the results of the United Nations Conference on the Environment and Development held in Rio de Janeiro in June 1992;

RECALLING the relevant provisions of customary international law reflected in Part XII of the United Nations Law of the Sea Convention and, in particular, Article 197 on global and regional cooperation for the protection and preservation of the marine environment;

CONSIDERING that the common interests of States concerned with the same marine area should induce them to cooperate at regional or sub-regional levels;

RECALLING the positive results obtained within the context of the Convention for the prevention of marine pollution by dumping from ships and aircraft signed in Oslo on 15th February 1972, as amended by the protocols of 2nd March 1983 and 5th December 1989, and the Convention for the prevention of marine pollution from land-based sources signed in Paris on 4th June 1974, as amended by the protocol of 26th March 1986:

CONVINCED that further international action to prevent and eliminate pollution of the sea should be taken without delay, as part of progressive and coherent measures to protect the marine environment:

RECOGNISING that it may be desirable to adopt, on the regional level, more stringent measures with respect to the prevention and elimination of pollution of the marine environment or with respect to the protection of the marine environment against the adverse effects of human activities than are provided for in international conventions or agreements with a global scope;

RECOGNISING that questions relating to the management of fisheries are appropriately regulated under international and regional agreements dealing specifically with such questions;

CONSIDERING that the present Oslo and Paris Conventions do not adequately control some of the many sources of pollution, and that it is therefore justifiable to replace them with the present Convention, which addresses all sources of pollution of the marine environment and the adverse effects of human activities upon it, takes into account the precautionary principle and strengthens regional cooperation;

HAVE AGREED as follows:

Definitions

For the purposes of the Convention:

- (a) "Maritime area" means the internal waters and the territorial seas of the Contracting Parties, the sea beyond and adjacent to the territorial sea under the jurisdiction of the coastal state to the extent recognised by international law, and the high seas, including the bed of all those waters and its sub-soil, situated within the following limits:
 - (i) those parts of the Atlantic and Arctic Oceans and their dependent seas which lie north of 36° north latitude and between 42° west longitude and 51° east longitude, but excluding:
 - (1) the Baltic Sea and the Belts lying to the south and east of lines drawn from Hasenore Head to Gniben Point, from Korshage to Spodsbjerg and from Gilbjerg Head to Kullen,
 - (2) the Mediterranean Sea and its dependent seas as far as the point of intersection of the parallel of 36° north latitude and the meridian of 5° 36' west longitude;
 - (ii) that part of the Atlantic Ocean north of 59° north latitude and between 44° west longitude and 42° west longitude.
- (b) "Internal waters" means the waters on the landward side of the baselines from which the breadth of the territorial sea is measured, extending in the case of watercourses up to the freshwater limit.
- (c) "Freshwater limit" means the place in a watercourse where, at low tide and in a period of low freshwater flow, there is an appreciable increase in salinity due to the presence of seawater.
- (d) "Pollution" means the introduction by man, directly or indirectly, of substances or energy into the maritime area which results, or is likely to result, in hazards to human health, harm to living resources and marine ecosystems, damage to amenities or interference with other legitimate uses of the sea.
- (e) "Land-based sources" means point and diffuse sources on land from which substances or energy reach the maritime area by water, through the air, or directly from the coast. It includes sources associated with any deliberate disposal under the sea-bed made accessible from land by tunnel, pipeline or other means and sources associated with man-made structures placed, in the maritime area under the jurisdiction of a Contracting Party, other than for the purpose of offshore activities.
- (f) "Dumping" means
 - (i) any deliberate disposal in the maritime area of wastes or other matter
 - (1) from vessels or aircraft;
 - (2) from offshore installations;
 - (ii) any deliberate disposal in the maritime area of
 - (1) vessels or aircraft;
 - (2) offshore installations and offshore pipelines.
- (g) "Dumping" does not include:
 - (i) the disposal in accordance with the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, or other applicable international law, of wastes or other matter incidental to, or derived from, the normal operations of vessels or aircraft or offshore installations other than wastes or other matter transported by or to vessels or aircraft or offshore installations for the purpose of disposal of such wastes or other matter or derived from the treatment of such wastes or other matter on such vessels or aircraft or offshore installations;

- (ii) placement of matter for a purpose other than the mere disposal thereof, provided that, if the placement is for a purpose other than that for which the matter was originally designed or constructed, it is in accordance with the relevant provisions of the Convention; and
- (iii) for the purposes of Annex III, the leaving wholly or partly in place of a disused offshore installation or disused offshore pipeline, provided that any such operation takes place in accordance with any relevant provision of the Convention and with other relevant international law.
- (h) "Incineration" means any deliberate combustion of wastes or other matter in the maritime area for the purpose of their thermal destruction.
- (i) "Incineration" does not include the thermal destruction of wastes or other matter in accordance with applicable international law incidental to, or derived from the normal operation of vessels or aircraft, or offshore installations other than the thermal destruction of wastes or other matter on vessels or aircraft or offshore installations operating for the purpose of such thermal destruction.
- (j) "Offshore activities" means activities carried out in the maritime area for the purposes of the exploration, appraisal or exploitation of liquid and gaseous hydrocarbons.
- (k) "Offshore sources" means offshore installations and offshore pipelines from which substances or energy reach the maritime area.
- (I) "Offshore installation" means any man-made structure, plant or vessel or parts thereof, whether floating or fixed to the seabed, placed within the maritime area for the purpose of offshore activities.
- (m) "Offshore pipeline" means any pipeline which has been placed in the maritime area for the purpose of offshore activities.
- (n) "Vessels or aircraft" means waterborne or airborne craft of any type whatsoever, their parts and other fittings. This expression includes air-cushion craft, floating craft whether self-propelled or not, and other man-made structures in the maritime area and their equipment, but excludes offshore installations and offshore pipelines.
- (o) "Wastes or other matter" does not include:
 - (i) human remains;
 - (ii) offshore installations;
 - (iii) offshore pipelines;
 - (iv) unprocessed fish and fish offal discarded from fishing vessels.
- (p) "Convention" means, unless the text otherwise indicates, the Convention for the Protection of the Marine Environment of the North-East Atlantic, its Annexes and Appendices.
- (q) "Oslo Convention" means the Convention for the Prevention of Marine Pollution by Dumping from Ships and Aircraft signed in Oslo on 15th February 1972, as amended by the protocols of 2nd March 1983 and 5th December 1989.
- (r) "Paris Convention" means the Convention for the Prevention of Marine Pollution from Land-based Sources, signed in Paris on 4th June 1974, as amended by the protocol of 26th March 1986.
- (s) "Regional economic integration organisation" means an organisation constituted by sovereign States of a given region which has competence in respect of matters governed by the Convention and has been duly authorised, in accordance with its internal procedures, to sign, ratify, accept, approve or accede to the Convention.

General Obligations

1. (a) The Contracting Parties shall, in accordance with the provisions of the Convention, take all possible steps to prevent and eliminate pollution and shall take the necessary measures to protect the maritime area against the adverse effects of human activities so as to safeguard human health and to conserve marine

- ecosystems and, when practicable, restore marine areas which have been adversely affected.
- (b) To this end Contracting Parties shall, individually and jointly, adopt programmes and measures and shall harmonise their policies and strategies.
- 2. The Contracting Parties shall apply:
 - (a) the precautionary principle, by virtue of which preventive measures are to be taken when there are reasonable grounds for concern that substances or energy introduced, directly or indirectly, into the marine environment may bring about hazards to human health, harm living resources and marine ecosystems, damage amenities or interfere with other legitimate uses of the sea, even when there is no conclusive evidence of a causal relationship between the inputs and the effects;
 - (b) the polluter pays principle, by virtue of which the costs of pollution prevention, control and reduction measures are to be borne by the polluter.
- (a) In implementing the Convention, Contracting Parties shall adopt programmes and measures which contain, where appropriate, time-limits for their completion and which take full account of the use of the latest technological developments and practices designed to prevent and eliminate pollution fully.
 - (b) To this end they shall:
 - taking into account the criteria set forth in Appendix 1, define with respect to programmes and measures the application of, *inter alia*,
 - best available techniques
 - best environmental practice

including, where appropriate, clean technology;

- (ii) in carrying out such programmes and measures, ensure the application of best available techniques and best environmental practice as so defined, including, where appropriate, clean technology.
- 4. The Contracting Parties shall apply the measures they adopt in such a way as to prevent an increase in pollution of the sea outside the maritime area or in other parts of the environment.
- 5. No provision of the Convention shall be interpreted as preventing the Contracting Parties from taking, individually or jointly, more stringent measures with respect to the prevention and elimination of pollution of the maritime area or with respect to the protection of the maritime area against the adverse effects of human activities.

ARTICLE 3

Pollution from Land-Based Sources

The Contracting Parties shall take, individually and jointly, all possible steps to prevent and eliminate pollution from land-based sources in accordance with the provisions of the Convention, in particular as provided for in Annex I.

ARTICLE 4

Pollution by Dumping or Incineration

The Contracting Parties shall take, individually and jointly, all possible steps to prevent and eliminate pollution by dumping or incineration of wastes or other matter in accordance with the provisions of the Convention, in particular as provided for in Annex II.

Pollution from Offshore Sources

The Contracting Parties shall take, individually and jointly, all possible steps to prevent and eliminate pollution from offshore sources in accordance with the provisions of the Convention, in particular as provided for in Annex III.

ARTICLE 6

Assessment of the Quality of the Marine Environment

The Contracting Parties shall, in accordance with the provisions of the Convention, in particular as provided for in Annex IV:

- undertake and publish at regular intervals joint assessments of the quality status of the marine environment and of its development, for the maritime area or for regions or sub-regions thereof;
- (b) include in such assessments both an evaluation of the effectiveness of the measures taken and planned for the protection of the marine environment and the identification of priorities for action.

ARTICLE 7

Pollution from Other Sources

The Contracting Parties shall cooperate with a view to adopting Annexes, in addition to the Annexes mentioned in Articles 3, 4, 5 and 6 above, prescribing measures, procedures and standards to protect the maritime area against pollution from other sources, to the extent that such pollution is not already the subject of effective measures agreed by other international organisations or prescribed by other international conventions.

ARTICLE 8

Scientific and Technical Research

- 1. To further the aims of the Convention, the Contracting Parties shall establish complementary or joint programmes of scientific or technical research and, in accordance with a standard procedure, to transmit to the Commission:
 - (a) the results of such complementary, joint or other relevant research;
 - (b) details of other relevant programmes of scientific and technical research.
- 2. In so doing, the Contracting Parties shall have regard to the work carried out, in these fields, by the appropriate international organisations and agencies.

ARTICLE 9

Access to Information

- 1. The Contracting Parties shall ensure that their competent authorities are required to make available the information described in paragraph 2 of this Article to any natural or legal person, in response to any reasonable request, without that person's having to prove an interest, without unreasonable charges, as soon as possible and at the latest within two months.
- 2. The information referred to in paragraph 1 of this Article is any available information in written, visual, aural or data-base form on the state of the maritime area, on activities or measures adversely affecting or likely to affect it and on activities or measures introduced in accordance with the Convention.

- 3. The provisions of this Article shall not affect the right of Contracting Parties, in accordance with their national legal systems and applicable international regulations, to provide for a request for such information to be refused where it affects:
 - (a) the confidentiality of the proceedings of public authorities, international relations and national defence:
 - (b) public security;
 - (c) matters which are, or have been, *sub judice*, or under enquiry (including disciplinary enquiries), or which are the subject of preliminary investigation proceedings;
 - (d) commercial and industrial confidentiality, including intellectual property;
 - (e) the confidentiality of personal data and/or files;
 - (f) material supplied by a third party without that party being under a legal obligation to do so:
 - (g) material, the disclosure of which would make it more likely that the environment to which such material related would be damaged.
- 4. The reasons for a refusal to provide the information requested must be given.

Commission

- 1. A Commission, made up of representatives of each of the Contracting Parties, is hereby established. The Commission shall meet at regular intervals and at any time when, due to special circumstances, it is so decided in accordance with the Rules of Procedure.
- 2. It shall be the duty of the Commission:
 - (a) to supervise the implementation of the Convention;
 - (b) generally to review the condition of the maritime area, the effectiveness of the measures being adopted, the priorities and the need for any additional or different measures:
 - (c) to draw up, in accordance with the General Obligations of the Convention, programmes and measures for the prevention and elimination of pollution and for the control of activities which may, directly or indirectly, adversely affect the maritime area; such programmes and measure may, when appropriate, include economic instruments;
 - (d) to establish at regular intervals its programme of work;
 - (e) to set up such subsidiary bodies as it considers necessary and to define their terms of reference;
 - (f) to consider and, where appropriate, adopt proposals for the amendment of the Convention in accordance with Articles 15, 16, 17, 18, 19 and 27;
 - (g) to discharge the functions conferred by Articles 21 and 23 and such other functions as may be appropriate under the terms of the Convention.
- 3. To these ends the Commission may, *inter alia*, adopt decisions and recommendations in accordance with Article 13.
- 4. The Commission shall draw up its Rules of Procedure which shall be adopted by unanimous vote of the Contracting Parties.
- 5. The Commission shall draw up its Financial Regulations which shall be adopted by unanimous vote of the Contracting Parties.

Observers

- 1. The Commission may, by unanimous vote of the Contracting Parties, decide to admit as an observer:
 - (a) any State which is not a Contracting Party to the Convention;
 - (b) any international governmental or any non-governmental organisation the activities of which are related to the Convention.
- 2. Such observers may participate in meetings of the Commission but without the right to vote and may present to the Commission any information or reports relevant to the objectives of the Convention.
- 3. The conditions for the admission and the participation of observers shall be set in the Rules of Procedure of the Commission.

ARTICLE 12

Secretariat

- 1. A permanent Secretariat is hereby established.
- 2. The Commission shall appoint an Executive Secretary and determine the duties of that post and the terms and conditions upon which it is to be held.
- 3. The Executive Secretary shall perform the functions that are necessary for the administration of the Convention and for the work of the Commission as well as the other tasks entrusted to the Executive Secretary by the Commission in accordance with its Rules of Procedure and its Financial Regulations.

ARTICLE 13

Decisions and Recommendations

- 1. Decisions and recommendations shall be adopted by unanimous vote of the Contracting Parties. Should unanimity not be attainable, and unless otherwise provided in the Convention, the Commission may nonetheless adopt decisions or recommendations by a three-quarters majority vote of the Contracting Parties.
- 2. A decision shall be binding on the expiry of a period of two hundred days after its adoption for those Contracting Parties that voted for it and have not within that period notified the Executive Secretary in writing that they are unable to accept the decision, provided that at the expiry of that period three-quarters of the Contracting Parties have either voted for the decision and not withdrawn their acceptance or notified the Executive Secretary in writing that they are able to accept the decision. Such a decision shall become binding on any other Contracting Party which has notified the Executive Secretary in writing that it is able to accept the decision from the moment of that notification or after the expiry of a period of two hundred days after the adoption of the decision, whichever is later.
- 3. A notification under paragraph 2 of this Article to the Executive Secretary may indicate that a Contracting Party is unable to accept a decision insofar as it relates to one or more of its dependent or autonomous territories to which the Convention applies.
- 4. All decisions adopted by the Commission shall, where appropriate, contain provisions specifying the timetable by which the decision shall be implemented.
- 5. Recommendations shall have no binding force.
- 6. Decisions concerning any Annex or Appendix shall be taken only by the Contracting Parties bound by the Annex or Appendix concerned.

Status of Annexes and Appendices

- 1. The Annexes and Appendices form an integral part of the Convention.
- 2. The Appendices shall be of a scientific, technical or administrative nature.

ARTICLE 15

Amendment of the Convention

- 1. Without prejudice to the provisions of paragraph 2 of Article 27 and to specific provisions applicable to the adoption or amendment of Annexes or Appendices, an amendment to the Convention shall be governed by the present Article.
- 2. Any Contracting Party may propose an amendment to the Convention. The text of the proposed amendment shall be communicated to the Contracting Parties by the Executive Secretary of the Commission at least six months before the meeting of the Commission at which it is proposed for adoption. The Executive Secretary shall also communicate the proposed amendment to the signatories to the Convention for information.
- 3. The Commission shall adopt the amendment by unanimous vote of the Contracting Parties.
- 4. The adopted amendment shall be submitted by the Depositary Government to the Contracting Parties for ratification, acceptance or approval. Ratification, acceptance or approval of the amendment shall be notified to the Depositary Government in writing.
- 5. The amendment shall enter into force for those Contracting Parties which have ratified, accepted or approved it on the thirtieth day after receipt by the Depositary Government of notification of its ratification, acceptance or approval by at least seven Contracting Parties. Thereafter the amendment shall enter into force for any other Contracting Party on the thirtieth day after that Contracting Party has deposited its instrument of ratification, acceptance or approval of the amendment.

ARTICLE 16

Adoption of Annexes

The provisions of Article 15 relating to the amendment of the Convention shall also apply to the proposal, adoption and entry into force of an Annex to the Convention, except that the Commission shall adopt any Annex referred to in Article 7 by a three-quarters majority vote of the Contracting Parties.

ARTICLE 17

Amendment of Annexes

- 1. The provisions of Article 15 relating to the amendment of the Convention shall also apply to an amendment to an Annex to the Convention, except that the Commission shall adopt amendments to any Annex referred to in Articles 3, 4, 5, 6 or 7 by a three-quarters majority vote of the Contracting Parties bound by that Annex.
- 2. If the amendment of an Annex is related to an amendment to the Convention, the amendment of the Annex shall be governed by the same provisions as apply to the amendment to the Convention.

Adoption of Appendices

- 1. If a proposed Appendix is related to an amendment to the Convention or an Annex, proposed for adoption in accordance with Article 15 or Article 17, the proposal, adoption and entry into force of that Appendix shall be governed by the same provisions as apply to the proposal, adoption and entry into force of that amendment.
- 2. If a proposed Appendix is related to an Annex to the Convention, proposed for adoption in accordance with Article 16, the proposal, adoption and entry into force of that Appendix shall be governed by the same provisions as apply to the proposal, adoption and entry into force of that Annex.

ARTICLE 19

Amendment of Appendices

- 1. Any Contracting Party bound by an Appendix may propose an amendment to that Appendix. The text of the proposed amendment shall be communicated to all Contracting Parties to the Convention by the Executive Secretary of the Commission as provided for in paragraph 2 of Article 15.
- 2. The Commission shall adopt the amendment to an Appendix by a three-quarters majority vote of the Contracting Parties bound by that Appendix.
- 3. An amendment to an Appendix shall enter into force on the expiry of a period of two hundred days after its adoption for those Contracting Parties which are bound by that Appendix and have not within that period notified the Depositary Government in writing that they are unable to accept that amendment, provided that at the expiry of that period three-quarters of the Contracting Parties bound by that Appendix have either voted for the amendment and not withdrawn their acceptance or have notified the Depositary Government in writing that they are able to accept the amendment.
- 4. A notification under paragraph 3 of this Article to the Depositary Government may indicate that a Contracting Party is unable to accept the amendment insofar as it relates to one or more of its dependent or autonomous territories to which the Convention applies.
- 5. An amendment to an Appendix shall become binding on any other Contracting Party bound by the Appendix which has notified the Depositary Government in writing that it is able to accept the amendment from the moment of that notification or after the expiry of a period of two hundred days after the adoption of the amendment, whichever is later.
- 6. The Depositary Government shall without delay notify all Contracting Parties of any such notification received.
- 7. If the amendment of an Appendix is related to an amendment to the Convention or an Annex, the amendment of the Appendix shall be governed by the same provisions as apply to the amendment to the Convention or that Annex.

ARTICLE 20

Right to Vote

- 1. Each Contracting Party shall have one vote in the Commission.
- 2. Notwithstanding the provisions of paragraph 1 of this Article, the European Economic Community and other regional economic integration organisations, within the areas of their competence, are entitled to a number of votes equal to the number of their Member States which are Contracting Parties to the Convention. Those organisations shall not exercise their right to vote in cases where their Member States exercise theirs and conversely.

Transboundary Pollution

- 1. When pollution originating from a Contracting Party is likely to prejudice the interests of one or more of the other Contracting Parties to the Convention, the Contracting Parties concerned shall enter into consultation, at the request of any one of them, with a view to negotiating a cooperation agreement.
- 2. At the request of any Contracting Party concerned, the Commission shall consider the question and may make recommendations with a view to reaching a satisfactory solution.
- 3. An agreement referred to in paragraph 1 of this Article may, *inter alia*, define the areas to which it shall apply, the quality objectives to be achieved and the methods for achieving these objectives, including methods for the application of appropriate standards and the scientific and technical information to be collected.
- 4. The Contracting Parties signatory to such an agreement shall, through the medium of the Commission, inform the other Contracting Parties of its purport and of the progress made in putting it into effect.

ARTICLE 22

Reporting to the Commission

The Contracting Parties shall report to the Commission at regular intervals on:

- (a) the legal, regulatory, or other measures taken by them for the implementation of the provisions of the Convention and of decisions and recommendations adopted thereunder, including in particular measures taken to prevent and punish conduct in contravention of those provisions;
- (b) the effectiveness of the measures referred to in subparagraph (a) of this Article;
- (c) problems encountered in the implementation of the provisions referred to in subparagraph (a) of this Article.

ARTICLE 23

Compliance

The Commission shall:

- on the basis of the periodical reports referred to in Article 22 and any other report submitted by the Contracting Parties, assess their compliance with the Convention and the decisions and recommendations adopted thereunder;
- (b) when appropriate, decide upon and call for steps to bring about full compliance with the Convention, and decisions adopted thereunder, and promote the implementation of recommendations, including measures to assist a Contracting Party to carry out its obligations.

ARTICLE 24

Regionalisation

The Commission may decide that any decision or recommendation adopted by it shall apply to all, or a specified part, of the maritime area and may provide for different timetables to be applied, having regard to the differences between ecological and economic conditions in the various regions and sub-regions covered by the Convention.

Signature

The Convention shall be open for signature at Paris from 22nd September 1992 to 30th June 1993 by:

- (a) the Contracting Parties to the Oslo Convention or the Paris Convention;
- (b) any other coastal State bordering the maritime area;
- (c) any State located upstream on watercourses reaching the maritime area;
- (d) any regional economic integration organisation having as a member at least one State to which any of the subparagraphs (a) to (c) of this Article applies.

ARTICLE 26

Ratification, Acceptance or Approval

The Convention shall be subject to ratification, acceptance or approval. The instruments of ratification, acceptance or approval shall be deposited with the Government of the French Republic.

ARTICLE 27

Accessions

- 1. After 30th June 1993, the Convention shall be open for accession by the States and regional economic integration organisations referred to in Article 25.
- 2. The Contracting Parties may unanimously invite States or regional economic integration organisations not referred to in Article 25 to accede to the Convention. In the case of such an accession, the definition of the maritime area shall, if necessary, be amended by a decision of the Commission adopted by unanimous vote of the Contracting Parties. Any such amendment shall enter into force after unanimous approval of all the Contracting Parties on the thirtieth day after the receipt of the last notification by the Depositary Government.
- 3. Any such accession shall relate to the Convention including any Annex and any Appendix that have been adopted at the date of such accession, except when the instrument of accession contains an express declaration of non-acceptance of one or several Annexes other than Annexes I. II. III and IV.
- 4. The instruments of accession shall be deposited with the Government of the French Republic.

ARTICLE 28

Reservations

No reservation to the Convention may be made.

ARTICLE 29

Entry into Force

- 1. The Convention shall enter into force on the thirtieth day following the date on which all Contracting Parties to the Oslo Convention and all Contracting Parties to the Paris Convention have deposited their instrument of ratification, acceptance, approval or accession.
- 2. For any State or regional economic integration organisation not referred to in paragraph 1 of this Article, the Convention shall enter into force in accordance with paragraph 1 of this Article, or on the thirtieth day following the date of the deposit of the instrument of ratification, acceptance, approval or accession by that State or regional economic integration organisations, whichever is later.

Withdrawal

- 1. At any time after the expiry of two years from the date of entry into force of the Convention for a Contracting Party, that Contracting Party may withdraw from the Convention by notification in writing to the Depositary Government.
- 2. Except as may be otherwise provided in an Annex other than Annexes I to IV to the Convention, any Contracting Party may at any time after the expiry of two years from the date of entry into force of such Annex for that Contracting Party withdraw from such Annex by notification in writing to the Depositary Government.
- 3. Any withdrawal referred to in paragraphs 1 and 2 of this Article shall take effect one year after the date on which the notification of that withdrawal is received by the Depositary Government.

ARTICLE 31

Replacement of the Oslo and Paris Conventions

- 1. Upon its entry into force, the Convention shall replace the Oslo and Paris Conventions as between the Contracting Parties.
- 2. Notwithstanding paragraph 1 of this Article, decisions, recommendations and all other agreements adopted under the Oslo Convention or the Paris Convention shall continue to be applicable, unaltered in their legal nature, to the extent that they are compatible with, or not explicitly terminated by, the Convention, any decisions or, in the case of existing recommendations, any recommendations adopted thereunder.

ARTICLE 32

Settlement of Disputes

- 1. Any disputes between Contracting Parties relating to the interpretation or application of the Convention, which cannot be settled otherwise by the Contracting Parties concerned, for instance by means of inquiry or conciliation within the Commission, shall at the request of any of those Contracting Parties, be submitted to arbitration under the conditions laid down in this Article.
- 2. Unless the parties to the dispute decide otherwise, the procedure of the arbitration referred to in paragraph 1 of this Article shall be in accordance with paragraphs 3 to 10 of this Article.
- 3. (a) At the request addressed by one Contracting Party to another Contracting Party in accordance with paragraph 1 of this Article, an arbitral tribunal shall be constituted. The request for arbitration shall state the subject matter of the application including in particular the Articles of the Convention, the interpretation or application of which is in dispute.
 - (b) The applicant party shall inform the Commission that it has requested the setting up of an arbitral tribunal, stating the name of the other party to the dispute and the Articles of the Convention the interpretation or application of which, in its opinion, is in dispute. The Commission shall forward the information thus received to all Contracting Parties to the Convention.
- 4. The arbitral tribunal shall consist of three members: each of the parties to the dispute shall appoint an arbitrator; 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.
- 5. (a) If the chairman of the arbitral tribunal has not been designated within two months of the appointment of the second arbitrator, the President of the International Court of

- Justice shall, at the request of either party, designate him within a further two months' period.
- (b) 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 President of the International Court of Justice 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 President of the International Court of Justice who shall make this appointment within a further two months' period.
- 6. (a) The arbitral tribunal shall decide according to the rules of international law and, in particular, those of the Convention.
 - (b) Any arbitral tribunal constituted under the provisions of this Article shall draw up its own rules of procedure.
 - (c) In the event of a dispute as to whether the arbitral tribunal has jurisdiction, the matter shall be decided by the decision of the arbitral tribunal.
- 7. (a) The decisions of the arbitral tribunal, both on procedure and on substance, shall be taken by majority voting of its members.
 - (b) 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.
 - (c) If two or more arbitral tribunals constituted under the provisions of this Article are seized of requests with identical or similar subjects, they may inform themselves of the procedures for establishing the facts and take them into account as far as possible.
 - (d) The parties to the dispute shall provide all facilities necessary for the effective conduct of the proceedings.
 - (e) The absence or default of a party to the dispute shall not constitute an impediment to the proceedings.
- 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.
- 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.
- 10. (a) 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.
 - (b) 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.

Duties of the Depositary Government

The Depositary Government shall inform the Contracting Parties and the signatories to the Convention:

- (a) of the deposit of instruments of ratification, acceptance, approval or accession, of declarations of non-acceptance and of notifications of withdrawal in accordance with Articles 26, 27 and 30;
- (b) of the date on which the Convention comes into force in accordance with Article 29;

(c) of the receipt of notifications of acceptance, of the deposit of instruments of ratification, acceptance, approval or accession and of the entry into force of amendments to the Convention and of the adoption and amendment of Annexes or Appendices, in accordance with Articles 15, 16, 17, 18 and 19.

ARTICLE 34

Original Text

The original of the Convention, of which the French and English texts shall be equally authentic, shall be deposited with the Government of the French Republic which shall send certified copies thereof to the Contracting Parties and the signatories to the Convention and shall deposit a certified copy with the Secretary General of the United Nations for registration and publication in accordance with Article 102 of the United Nations Charter.

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

DONE at Paris, on the twenty-second day of September 1992

Annex I

On the Prevention and Elimination of Pollution from Land-based Sources

ARTICLE 1

- 1. When adopting programmes and measures for the purpose of this Annex, the Contracting Parties shall require, either individually or jointly, the use of
 - best available techniques for point sources
 - best environmental practice for point and diffuse sources

including, where appropriate, clean technology.

- 2. When setting priorities and in assessing the nature and extent of the programmes and measures and their time scales, the Contracting Parties shall use the criteria given in Appendix 2.
- 3. The Contracting Parties shall take preventive measures to minimise the risk of pollution caused by accidents.
- 4. When adopting programmes and measures in relation to radioactive substances, including waste, the Contracting Parties shall also take account of:
 - (a) the recommendations of the other appropriate international organisations and agencies;
 - (b) the monitoring procedures recommended by these international organisations and agencies.

ARTICLE 2

- 1. Point source discharges to the maritime area, and releases into water or air which reach and may affect the maritime area, shall be strictly subject to authorisation or regulation by the competent authorities of the Contracting Parties. Such authorisation or regulation shall, in particular, implement relevant decisions of the Commission which bind the relevant Contracting Party.
- 2. The Contracting Parties shall provide for a system of regular monitoring and inspection by their competent authorities to assess compliance with authorisations and regulations of releases into water or air.

ARTICLE 3

For the purposes of this Annex, it shall, inter alia, be the duty of the Commission to draw up:

- (a) plans for the reduction and phasing out of substances that are toxic, persistent and liable to bioaccumulate arising from land-based sources;
- (b) when appropriate, programmes and measures for the reduction of inputs of nutrients from urban, municipal, industrial, agricultural and other sources.

Annex II

On the Prevention and Elimination of Pollution by Dumping or Incineration

ARTICLE 1

This Annex shall not apply to any deliberate disposal in the maritime area of:

- (a) wastes or other matter from offshore installations;
- (b) offshore installations and offshore pipelines.

ARTICLE 2

Incineration is prohibited.

ARTICLE 3

1. The dumping of all wastes or other matter is prohibited, except for those wastes or other matter listed in paragraphs 2 and 3 of this Article.

- 2. The list referred to in paragraph 1 of this Article is as follows:
 - (a) dredged material;
 - (b) inert materials of natural origin, that is solid, chemically unprocessed geological material the chemical constituents of which are unlikely to be released into the marine environment;
 - (c) sewage sludge until 31st December 1998;
 - (d) fish waste from industrial fish processing operations;
 - (e) vessels or aircraft until, at the latest, 31st December 2004.
- 3. (a) The dumping of low and intermediate level radioactive substances, including wastes, is prohibited.
 - (b) As an exception to subparagraph 3(a) of this Article, those Contracting Parties, the United Kingdom and France, who wish to retain the option of an exception to subparagraph 3(a) in any case not before the expiry of a period of 15 years from 1st January 1993, shall report to the meeting of the Commission at Ministerial level in 1997 on the steps taken to explore alternative land-based options.
 - (c) Unless, at or before the expiry of this period of 15 years, the Commission decides by a unanimous vote not to continue the exception provided in subparagraph 3(b), it shall take a decision pursuant to Article 13 of the Convention on the prolongation for a period of 10 years after 1st January 2008 of the prohibition, after which another meeting of the Commission at Ministerial level shall be held. Those Contracting Parties mentioned in subparagraph 3(b) of this Article still wishing to retain the option mentioned in subparagraph 3(b) shall report to the Commission meetings to be held at Ministerial level at two yearly intervals from 1999 onwards about the progress in establishing alternative land-based options and on the results of scientific studies which show that any potential dumping operations would not result in hazards to human health, harm to living resources or marine ecosystems, damage to amenities or interference with other legitimate uses of the sea.

After the entry into force of OSPAR Decision 98/2 on Dumping of Radioactive Waste on 9 February 1999, subparagraphs (b) and (c) of this paragraph ceased to have effect.

- The Contracting Parties shall ensure that:
 - (a) no wastes or other matter listed in paragraph 2 of Article 3 of this Annex shall be dumped without authorisation by their competent authorities, or regulation;
 - (b) such authorisation or regulation is in accordance with the relevant applicable criteria, guidelines and procedures adopted by the Commission in accordance with Article 6 of this Annex;
 - (c) with the aim of avoiding situations in which the same dumping operation is authorised or regulated by more than one Contracting Party, their competent authorities shall, as appropriate, consult before granting an authorisation or applying regulation.
- 2. Any authorisation or regulation under paragraph 1 of this Article shall not permit the dumping of vessels or aircraft containing substances which result or are likely to result in hazards to human health, harm to living resources and marine ecosystems, damage to amenities or interference with other legitimate uses of the sea.
- 3. Each Contracting Party shall keep, and report to the Commission records of the nature and the quantities of wastes or other matter dumped in accordance with paragraph 1 of this Article, and of the dates, places and methods of dumping.

ARTICLE 5

No placement of matter in the maritime area for a purpose other than that for which it was originally designed or constructed shall take place without authorisation or regulation by the competent authority of the relevant Contracting Party. Such authorisation or regulation shall be in accordance with the relevant applicable criteria, guidelines and procedures adopted by the Commission in accordance with Article 6 of this Annex. This provision shall not be taken to permit the dumping of wastes or other matter otherwise prohibited under this Annex.

ARTICLE 6

For the purposes of this Annex, it shall, *inter alia*, be the duty of the Commission to draw up and adopt criteria, guidelines and procedures relating to the dumping of wastes or other matter listed in paragraph 2 of Article 3, and to the placement of matter referred to in Article 5, of this Annex, with a view to preventing and eliminating pollution.

ARTICLE 7

The provisions of this Annex concerning dumping shall not apply in case of *force majeure*, due to stress of weather or any other cause, when the safety of human life or of a vessel or aircraft is threatened. Such dumping shall be so conducted as to minimise the likelihood of damage to human or marine life and shall immediately be reported to the Commission, together with full details of the circumstances and of the nature and quantities of the wastes or other matter dumped.

ARTICLE 8

The Contracting Parties shall take appropriate measures, both individually and within relevant international organisations, to prevent and eliminate pollution resulting from the abandonment of vessels or aircraft in the maritime area caused by accidents. In the absence of relevant guidance from such international organisations, the measures taken by individual Contracting Parties should be based on such guidelines as the Commission may adopt.

In an emergency, if a Contracting Party considers that wastes or other matter the dumping of which is prohibited under this Annex cannot be disposed of on land without unacceptable danger or damage, it shall forthwith consult other Contracting Parties with a view to finding the most satisfactory methods of storage or the most satisfactory means of destruction or disposal under the prevailing circumstances. The Contracting Party shall inform the Commission of the steps adopted following this consultation. The Contracting Parties pledge themselves to assist one another in such situations.

ARTICLE 10

- 1. Each Contracting Party shall ensure compliance with the provisions of this Annex:
 - (a) by vessels or aircraft registered in its territory;
 - (b) by vessels or aircraft loading in its territory the wastes or other matter which are to be dumped or incinerated;
 - (c) by vessels or aircraft believed to be engaged in dumping or incineration within its internal waters or within its territorial sea or within that part of the sea beyond and adjacent to the territorial sea under the jurisdiction of the coastal state to the extent recognised by international law.
- 2. Each Contracting Party shall issue instructions to its maritime inspection vessels and aircraft and to other appropriate services to report to its authorities any incidents or conditions in the maritime area which give rise to suspicions that dumping in contravention of the provisions of the present Annex has occurred or is about to occur. Any Contracting Party whose authorities receive such a report shall, if it considers it appropriate, accordingly inform any other Contracting Party concerned.
- 3. Nothing in this Annex shall abridge the sovereign immunity to which certain vessels are entitled under international law.

Annex III

On the Prevention and Elimination of Pollution from Offshore Sources

ARTICLE 1

This Annex shall not apply to any deliberate disposal in the maritime area of:

- (a) wastes or other matter from vessels or aircraft;
- (b) vessels or aircraft.

ARTICLE 2

- 1. When adopting programmes and measures for the purpose of this Annex, the Contracting Parties shall require, either individually or jointly, the use of:
 - (a) best available techniques
 - (b) best environmental practice

including, where appropriate, clean technology.

2. When setting priorities and in assessing the nature and extent of the programmes and measures and their time scales, the Contracting Parties shall use the criteria given in Appendix 2.

ARTICLE 3

- Any dumping of wastes or other matter from offshore installations is prohibited.
- 2. This prohibition does not relate to discharges or emissions from offshore sources.

ARTICLE 4

- 1. The use on, or the discharge or emission from, offshore sources of substances which may reach and affect the maritime area shall be strictly subject to authorisation or regulation by the competent authorities of the Contracting Parties. Such authorisation or regulation shall, in particular, implement the relevant applicable decisions, recommendations and all other agreements adopted under the Convention.
- 2. The competent authorities of the Contracting Parties shall provide for a system of monitoring and inspection to assess compliance with authorisation or regulation as provided for in paragraph 1 of Article 4 of this Annex.

ARTICLE 5

- 1. No disused offshore installation or disused offshore pipeline shall be dumped and no disused offshore installation shall be left wholly or partly in place in the maritime area without a permit issued by the competent authority of the relevant Contracting Party on a case-by-case basis. The Contracting Parties shall ensure that their authorities, when granting such permits, shall implement the relevant applicable decisions, recommendations and all other agreements adopted under the Convention.
- 2. No such permit shall be issued if the disused offshore installation or disused offshore pipeline contains substances which result or are likely to result in hazards to human health, harm to living resources and marine ecosystems, damage to amenities or interference with other legitimate uses of the sea.
- 3. Any Contracting Party which intends to take the decision to issue a permit for the dumping of a disused offshore installation or a disused offshore pipeline placed in the maritime

area after 1st January 1998 shall, through the medium of the Commission, inform the other Contracting Parties of its reasons for accepting such dumping, in order to make consultation possible.

4. Each Contracting Party shall keep, and report to the Commission, records of the disused offshore installations and disused offshore pipelines dumped and of the disused offshore installations left in place in accordance with the provisions of this Article, and of the dates, places and methods of dumping.

ARTICLE 6

Articles 3 and 5 of this Annex shall not apply in case of *force majeure*, due to stress of weather or any other cause, when the safety of human life or of an offshore installation is threatened. Such dumping shall be so conducted as to minimise the likelihood of damage to human or marine life and shall immediately be reported to the Commission, together with full details of the circumstances and of the nature and quantities of the matter dumped.

ARTICLE 7

The Contracting Parties shall take appropriate measures, both individually and within relevant international organisations, to prevent and eliminate pollution resulting from the abandonment of offshore installations in the maritime area caused by accidents. In the absence of relevant guidance from such international organisations, the measures taken by individual Contracting Parties should be based on such guidelines as the Commission may adopt.

ARTICLE 8

No placement of a disused offshore installation or a disused offshore pipeline in the maritime area for a purpose other than that for which it was originally designed or constructed shall take place without authorisation or regulation by the competent authority of the relevant Contracting Party. Such authorisation or regulation shall be in accordance with the relevant applicable criteria, guidelines and procedures adopted by the Commission in accordance with subparagraph (d) of Article 10 of this Annex. This provision shall not be taken to permit the dumping of disused offshore installations or disused offshore pipelines in contravention of the provisions of this Annex.

ARTICLE 9

- 1. Each Contracting Party shall issue instructions to its maritime inspection vessels and aircraft and to other appropriate services to report to its authorities any incidents or conditions in the maritime area which give rise to suspicions that a contravention of the provisions of the present Annex has occurred or is about to occur. Any Contracting Party whose authorities receive such a report shall, if it considers it appropriate, accordingly inform any other Contracting Party concerned.
- 2. Nothing in this Annex shall abridge the sovereign immunity to which certain vessels are entitled under international law.

ARTICLE 10

For the purposes of this Annex, it shall, *inter alia*, be the duty of the Commission:

- to collect information about substances which are used in offshore activities and, on the basis of that information, to agree lists of substances for the purposes of paragraph 1 of Article 4 of this Annex;
- (b) to list substances which are toxic, persistent and liable to bioaccumulate and to draw up plans for the reduction and phasing out of their use on, or discharge from, offshore sources;

- (c) to draw up criteria, guidelines and procedures for the prevention of pollution from dumping of disused offshore installations and of disused offshore pipelines, and the leaving in place of offshore installations, in the maritime area;
- (d) to draw up criteria, guidelines and procedures relating to the placement of disused offshore installations and disused offshore pipelines referred to in Article 8 of this Annex, with a view to preventing and eliminating pollution.

Annex IV

On the Assessment of the Quality of the Marine Environment

ARTICLE 1

- For the purposes of this Annex "monitoring" means the repeated measurement of:
 - (a) the quality of the marine environment and each of its compartments, that is, water, sediments and biota:
 - (b) activities or natural and anthropogenic inputs which may affect the quality of the marine environment;
 - (c) the effects of such activities and inputs.
- 2. Monitoring may be undertaken either for the purposes of ensuring compliance with the Convention, with the objective of identifying patterns and trends or for research purposes.

ARTICLE 2

For the purposes of this Annex, the Contracting Parties shall:

- (a) cooperate in carrying out monitoring programmes and submit the resulting data to the Commission;
- (b) comply with quality assurance prescriptions and participate in intercalibration exercises:
- use and develop, individually or preferably jointly, other duly validated scientific assessment tools, such as modelling, remote sensing and progressive risk assessment strategies;
- (d) carry out, individually or preferably jointly, research which is considered necessary to assess the quality of the marine environment, and to increase knowledge and scientific understanding of the marine environment and, in particular, of the relationship between inputs, concentration and effects;
- (e) take into account scientific progress which is considered to be useful for such assessment purposes and which has been made elsewhere either on the initiative of individual researchers and research institutions, or through other national and international research programmes or under the auspices of the European Economic Community or other regional economic integration organisations.

ARTICLE 3

For the purposes of this Annex, it shall, inter alia, be the duty of the Commission:

- to define and implement programmes of collaborative monitoring and assessmentrelated research, to draw up codes of practice for the guidance of participants in carrying out these monitoring programmes and to approve the presentation and interpretation of their results;
- (b) to carry out assessments taking into account the results of relevant monitoring and research and the data relating to inputs of substances or energy into the maritime area which are provided by virtue of other Annexes to the Convention, as well as other relevant information:
- (c) to seek, where appropriate, the advice or services of competent regional organisations and other competent international organisations and competent bodies with a view to incorporating the latest results of scientific research;
- (d) to cooperate with competent regional organisations and other competent international organisations in carrying out quality status assessments.

Annex V

On the Protection and Conservation of the Ecosystems and Biological Diversity of the Maritime Area ⁶⁷

ARTICLE 1

For the purposes of this Annex and of Appendix 3 the definitions of "biological diversity", "ecosystem" and "habitat" are those contained in the Convention on Biological Diversity of 5 June 1992.

ARTICLE 2

In fulfilling their obligation under the Convention to take, individually and jointly, the necessary measures to protect the maritime area against the adverse effects of human activities so as to safeguard human health and to conserve marine ecosystems and, when practicable, restore marine areas which have been adversely affected, as well as their obligation under the Convention on Biological Diversity of 5 June 1992 to develop strategies, plans or programmes for the conservation and sustainable use of biological diversity, Contracting Parties shall:

- a. take the necessary measures to protect and conserve the ecosystems and the biological diversity of the maritime area, and to restore, where practicable, marine areas which have been adversely affected; and
- b. cooperate in adopting programmes and measures for those purposes for the control of the human activities identified by the application of the criteria in Appendix 3.

ARTICLE 3

- 1. For the purposes of this Annex, it shall inter alia be the duty of the Commission:
 - a. to draw up programmes and measures for the control of the human activities identified by the application of the criteria in Appendix 3;
 - b. in doing so:
 - (i) to collect and review information on such activities and their effects on ecosystems and biological diversity;
 - (ii) to develop means, consistent with international law, for instituting protective, conservation, restorative or precautionary measures related to specific areas or sites or related to particular species or habitats:
 - (iii) subject to Article 4 of this Annex, to consider aspects of national strategies and guidelines on the sustainable use of components of biological diversity of the maritime area as they affect the various regions and sub-regions of that area;
 - (iv) subject to Article 4 of this Annex, to aim for the application of an integrated ecosystem approach.

In accordance with Article 15.5 of the Convention, Annex V has entered into force:

on 30 August 2000 for Finland, Spain, Switzerland, Luxembourg, European Community, United Kingdom and Denmark;

on 5 October 2000 for Sweden;

on 18 July 2001 for Iceland;

on 22 July 2001 for Norway;

on 24 August 2001 for the Netherlands;

on 13 January 2002 for Germany;

on 21 June 2003 for Ireland.

- c. also in doing so, to take account of programmes and measures adopted by Contracting Parties for the protection and conservation of ecosystems within waters under their sovereignty or jurisdiction.
- 2. In the adoption of such programmes and measures, due consideration shall be given to the question whether any particular programme or measure should apply to all, or a specified part, of the maritime area.

- 1. In accordance with the penultimate recital of the Convention, no programme or measure concerning a question relating to the management of fisheries shall be adopted under this Annex. However where the Commission considers that action is desirable in relation to such a question, it shall draw that question to the attention of the authority or international body competent for that question. Where action within the competence of the Commission is desirable to complement or support action by those authorities or bodies, the Commission shall endeavour to cooperate with them.
- 2. Where the Commission considers that action under this Annex is desirable in relation to a question concerning maritime transport, it shall draw that question to the attention of the International Maritime Organisation. The Contracting Parties who are members of the International Maritime Organisation shall endeavour to cooperate within that Organisation in order to achieve an appropriate response, including in relevant cases that Organisation's agreement to regional or local action, taking account of any guidelines developed by that Organisation on the designation of special areas, the identification of particularly sensitive areas or other matters.

Criteria for the Definition of Practices and Techniques mentioned in Paragraph 3(b)(i) of Article 2 of the Convention

BEST AVAILABLE TECHNIQUES

- 1. The use of the best available techniques shall emphasise the use of non-waste technology, if available.
- 2. The term "best available techniques" means the latest stage of development (state of the art) of processes, of facilities or of methods of operation which indicate the practical suitability of a particular measure for limiting discharges, emissions and waste. In determining whether a set of processes, facilities and methods of operation constitute the best available techniques in general or individual cases, special consideration shall be given to:
 - (a) comparable processes, facilities or methods of operation which have recently been successfully tried out;
 - (b) technological advances and changes in scientific knowledge and understanding;
 - (c) the economic feasibility of such techniques;
 - (d) time limits for installation in both new and existing plants;
 - (e) the nature and volume of the discharges and emissions concerned.
- 3. It therefore follows that what is "best available techniques" for a particular process will change with time in the light of technological advances, economic and social factors, as well as changes in scientific knowledge and understanding.
- 4. If the reduction of discharges and emissions resulting from the use of best available techniques does not lead to environmentally acceptable results, additional measures have to be applied.
- 5. "Techniques" include both the technology used and the way in which the installation is designed, built, maintained, operated and dismantled.

BEST ENVIRONMENTAL PRACTICE

- 6. The term "best environmental practice" means the application of the most appropriate combination of environmental control measures and strategies. In making a selection for individual cases, at least the following graduated range of measures should be considered:
 - (a) the provision of information and education to the public and to users about the environmental consequences of choice of particular activities and choice of products, their use and ultimate disposal;
 - (b) the development and application of codes of good environmental practice which covers all aspect of the activity in the product's life;
 - (c) the mandatory application of labels informing users of environmental risks related to a product, its use and ultimate disposal;
 - (d) saving resources, including energy;
 - (e) making collection and disposal systems available to the public;
 - (f) avoiding the use of hazardous substances or products and the generation of hazardous waste;
 - (g) recycling, recovery and re-use;
 - (h) the application of economic instruments to activities, products or groups of products;
 - (i) establishing a system of licensing, involving a range of restrictions or a ban.

- 7. In determining what combination of measures constitute best environmental practice, in general or individual cases, particular consideration should be given to:
 - (a) the environmental hazard of the product and its production, use and ultimate disposal;
 - (b) the substitution by less polluting activities or substances;
 - (c) the scale of use;
 - (d) the potential environmental benefit or penalty of substitute materials or activities;
 - (e) advances and changes in scientific knowledge and understanding;
 - (f) time limits for implementation;
 - (g) social and economic implications.
- 8. It therefore follows that best environmental practice for a particular source will change with time in the light of technological advances, economic and social factors, as well as changes in scientific knowledge and understanding.
- 9. If the reduction of inputs resulting from the use of best environmental practice does not lead to environmentally acceptable results, additional measures have to be applied and best environmental practice redefined.

Criteria mentioned in Paragraph 2 of Article 1 of Annex I and in Paragraph 2 of Article 2 of Annex III

- 1. When setting priorities and in assessing the nature and extent of the programmes and measures and their time scales, the Contracting Parties shall use the criteria given below:
 - (a) persistency;
 - (b) toxicity or other noxious properties;
 - (c) tendency to bioaccumulation;
 - (d) radioactivity;
 - (e) the ratio between observed or (where the results of observations are not yet available) predicted concentrations and no observed effect concentrations;
 - (f) anthropogenically caused risk of eutrophication;
 - (g) transboundary significance;
 - (h) risk of undesirable changes in the marine ecosystem and irreversibility or durability of effects:
 - (i) interference with harvesting of sea-foods or with other legitimate uses of the sea;
 - (j) effects on the taste and/or smell of products for human consumption from the sea, or effects on smell, colour, transparency or other characteristics of the water in the marine environment:
 - (k) distribution pattern (i.e., quantities involved, use pattern and liability to reach the marine environment);
 - (I) non-fulfilment of environmental quality objectives.
- 2. These criteria are not necessarily of equal importance for the consideration of a particular substance or group of substances.
- 3. The above criteria indicate that substances which shall be subject to programmes and measures include:
 - (a) heavy metals and their compounds;
 - (b) organohalogen compounds (and substances which may form such compounds in the marine environment);
 - (c) organic compounds of phosphorus and silicon;
 - (d) biocides such as pesticides, fungicides, herbicides, insecticides, slimicides and chemicals used, *inter alia*, for the preservation of wood, timber, wood pulp, cellulose, paper, hides and textiles;
 - (e) oils and hydrocarbons of petroleum origin;
 - (f) nitrogen and phosphorus compounds;
 - (g) radioactive substances, including wastes;
 - (h) persistent synthetic materials which may float, remain in suspension or sink.

Criteria for Identifying Human Activities for the Purpose of Annex V ⁶⁸

- 1. The criteria to be used, taking into account regional differences, for identifying human activities for the purposes of Annex V are:
 - a. the extent, intensity and duration of the human activity under consideration;
 - b. actual and potential adverse effects of the human activity on specific species, communities and habitats;
 - actual and potential adverse effects of the human activity on specific ecological processes;
 - d. irreversibility or durability of these effects.
- 2. These criteria are not necessarily exhaustive or of equal importance for the consideration of a particular activity.

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In accordance with Article 15.5 of the Convention, Appendix 3 has entered into force:

on 30 August 2000 for Finland, Spain, Switzerland, Luxembourg, European Community, United Kingdom and Denmark;

on 5 October 2000 for Sweden;

[•] on 18 July 2001 for Iceland;

on 22 July 2001 for Norway;

on 24 August 2001 for the Netherlands;

on 13 January 2002 for Germany;

[•] on 21 June 2003 for Ireland.

Declarations accompanying the Signature of Denmark and the United Kingdom of Great Britain and Northern Ireland to the Convention for the Protection of the Marine Environment of the North-East Atlantic

Denmark's signature to the Convention for the Protection of the Marine Environment of the North-East Atlantic was accompanied by the following declaration⁶⁹:

"The present Convention is subject to ratification and with reservation for application to the Faroe Islands and Greenland."

The United Kingdom's signature to the Convention for the Protection of the Marine Environment of the North-East Atlantic was accompanied by the following declaration⁷⁰:

"The Government of the United Kingdom of Great Britain and Northern Ireland declares its understanding of the effect of the paragraph 3 of Article 3 of Annex II to the Convention to be amongst other things that, where the Commission takes a decision pursuant to Article 13 of the Convention, on the prolongation of the prohibition set out in subparagraph (3)(a), those Contracting Parties who wish to retain the option of the exception to that prohibition as provided for in subparagraph (3)(b) may retain that option, provided that they are not bound, under paragraph 2 of Article 13, by that decision."

Following Denmark's ratification of the OSPAR Convention, Denmark notified France as the Depository Government that Denmark had withdrawn its reservation from the Declaration accompanying Denmark's signature to the Convention.

⁷⁰ See footnote 66.