



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

(Reference number: 2003-21)

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 species¹ 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:
 - (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 issues² 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 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

¹ Wherever in this Strategy the term “species” is used, this includes, where appropriate, populations of such species.

² 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.

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;
- 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:

- a. 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;
- 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;

- 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 - EUTROPHICATION³

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:

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

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 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 concerned⁴ 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;

⁴ These Recommendations apply in the form in which they were adopted.

(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;
- 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:

- a. 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);

- d. 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;
- c. 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 SUBSTANCES⁵

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 Appendix 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 available⁶, is a means to reach this objective;

⁵ A number of terms used in this strategy are defined in Appendix 2.

⁶ “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.

- c. 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:

- (i) 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 2001⁷, 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:
 - (i) 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 list have the potential to cause adverse effects to organisms in the marine environment;

⁷ OSPAR Agreement 2001-1.

- (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:

- a. 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 available⁸ 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.

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

⁸ “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.

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 forums⁹ 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 co-operation 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 offshore activities¹⁰ 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:

⁹ 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.

¹⁰ Defined in the OSPAR Convention as:

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

- (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 activities¹¹ 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;
- c. establish and periodically review environmental goals¹² and timeframes for the purpose of achieving the objective of this strategy through:
 - (i) the prevention and elimination of pollution from offshore sources¹³;

¹¹ 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.

¹² Where stepwise implementation is desirable, intermediate goals could also be established.

¹³ Defined in the OSPAR Convention as:

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

"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.

"Offshore pipeline" means any pipeline which has been placed in the maritime area for the purpose of offshore activities.

- (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

- c. 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 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;
- b. 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:
 - (i) 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;
- c. 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 SUBSTANCES¹⁴

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. the recommendations of the other appropriate international organisations and agencies;
- b. the monitoring procedures recommended by these international organisations and agencies;
- c. 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.

¹⁴ A number of terms used in this strategy are defined in Appendix 3.

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 will¹⁵:

- 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:

- (i) 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:
- (v) 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.

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 Substances¹⁶ 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

¹⁵ 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.

¹⁶ OSPAR agreement with reference number: 2001-3.

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:

- a. 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.

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.

APPENDICES

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

Definitions for the purposes of the Hazardous Substances Strategy

1. For the purpose of the Hazardous Substances Strategy:
 - a. “hazardous substances”¹⁷ 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;
 - b. “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:
 - (i) 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 2001¹⁸, or any subsequent modification.

¹⁷ 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).

¹⁸ OSPAR Agreement 2001/1.

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.