



The North-East Atlantic Environment Strategy

Strategy of the OSPAR Commission for the Protection of the Marine Environment of the North-East Atlantic 2010–2020

(OSPAR Agreement 2010-3)

Preamble

1. 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;
2. BEARING IN MIND that the Ecosystem Approach to the management of all human activities that have an impact on the marine environment needs to be applied as an overarching principle in OSPAR’s work in order to achieve sustainable use of ecosystem goods and services and to safeguard ecosystem integrity;
3. RECALLING Directive 2008/56/EC establishing a Framework for Community Action in the field of Marine Environmental Policy (Marine Strategy Framework Directive)¹ and RECOGNISING that the OSPAR Commission will facilitate the coordinated and coherent implementation of the regional components of this Directive, mindful of Contracting Parties’ interest that their actions serve at the same time to promote the objectives of the OSPAR Commission and, to the extent that they are bound by it, those of relevant European Union (EU) legislation, hence ensuring a maximum synergy wherever possible;
4. RECOGNISING that the Quality Status Report 2010 (QSR 2010) has clearly shown that whilst a number of the objectives and targets of the 2003 Strategies of the OSPAR Commission for the Protection of the Marine Environment of the North-East Atlantic (“2003 OSPAR Strategies”) have been achieved, many are still not reached, and require continued efforts;
5. CONCERNED that impacts of human activities on the marine environment are further increasing and loss of biodiversity continues at an unacceptable rate;
6. CONCERNED ALSO that first effects of climate change and ocean acidification are apparent throughout the OSPAR maritime area and that pressures on the marine environment from climate change and ocean acidification are set to grow;

¹ Iceland, Norway and Switzerland are not Members of the European Union. While Iceland and Norway are Members of the European Economic Area (EEA) and may thus be bound by certain EU legislation, Switzerland has not committed itself to comply with EU legislation in the scope of the OSPAR Convention. In those fields where this document refers not only to the implementation of OSPAR programmes and measures but also to the implementation of EU legislation, these three countries contribute on the basis of OSPAR programmes and measures adopted by them and/or any applicable other legislation by which they are bound.

7. HAVING REVIEWED the implementation of the 2003 OSPAR Strategies, including the Strategy for the Joint Assessment and Monitoring Programme, and the Statement on the Ecosystem Approach to the management of human activities, and HAVING TAKEN INTO ACCOUNT new legal commitments, notably the requirement of the Marine Strategy Framework Directive that EU Member States take the necessary measures to achieve or maintain good environmental status in the marine environment by 2020,

8. The Contracting Parties to the Convention for the Protection of the Marine Environment of the North-East Atlantic, REAFFIRM their commitments and ADOPT the Strategy of the OSPAR Commission for the Protection of the Marine Environment of the North-East Atlantic 2010–2020 (“the North-East Atlantic Environment Strategy”) to direct the future work of the OSPAR Commission.

Part I of this Strategy presents the OSPAR Commission’s concept for implementing the Ecosystem Approach. Part II presents the OSPAR thematic strategies. The OSPAR Commission will use its Joint Assessment and Monitoring Programme (JAMP) (OSPAR Agreement 2010-?) as the main means to review progress achieved through this Strategy.

PART I: IMPLEMENTING THE ECOSYSTEM APPROACH

The OSPAR Commission’s vision is a clean, healthy and biologically diverse North-East Atlantic ocean, used sustainably.

To this end, the OSPAR Commission’s activities under this Strategy will be guided by the application of the Ecosystem Approach which is 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 the marine ecosystems, thereby achieving sustainable use of ecosystem goods and services and maintenance of ecosystem integrity². The OSPAR Commission will implement the Ecosystem Approach taking account of its role within the wider political and legal frameworks.

1. Role of the OSPAR Commission

1.1 The OSPAR Commission is, in accordance with Article 197 of the UN Convention on the Law of the Sea (UNCLOS) on regional cooperation, the competent regional organisation guiding international cooperation on the protection of the marine environment of the North-East Atlantic.

1.2 The role of the OSPAR Commission is to harmonise policies and strategies, including the drawing up of programmes and measures, for the protection of the marine environment. The OSPAR Commission also undertakes and publishes at regular intervals joint assessments of the quality status of the marine environment and of the effectiveness of the measures taken and planned. On the basis of *inter alia* these Quality Status Reports, the OSPAR Commission identifies priorities for action for the protection of the marine environment.

1.3 OSPAR Contracting Parties that are EU Member States have agreed that the OSPAR Commission should be the main platform through which they coordinate their work to implement the EU Marine Strategy Framework Directive (MSFD) in the North-East Atlantic. The MSFD aims to achieve good environmental status for the EU Member States’ marine waters by 2020, applying the Ecosystem Approach. The Directive contains an obligation for EU Member States to cooperate to ensure the coordinated development of marine strategies for each marine region or sub-region and, where practical and appropriate, make use of existing institutional structures established in marine regions or sub-regions, in particular Regional Seas

² As defined by the Statement on the Ecosystem Approach to the Management of Human Activities “Towards an Ecosystem Approach to the Management of Human Activities” adopted in 2003 by the Joint Ministerial Meeting of the Helsinki and OSPAR Commissions.

Conventions. The OSPAR Commission will facilitate the implementation of the MSFD by implementing its North-East Atlantic Environment Strategy and by contributing to the further development of the elements of good environmental status under the MSFD, as referred to in Annex 2, to the extent this is relevant for the respective strategies. Vice versa, the implementation of the MSFD will contribute towards OSPAR's objectives.

1.4 The OSPAR Commission will use its efficient cooperation structures in order to facilitate the coordinated implementation of the MSFD, thereby ensuring, where practical and appropriate, *inter alia* (i) that assessment methodologies are consistent across the North-East Atlantic and its five Regions, of which four are identical with sub-regions of the MSFD; (ii) that environmental targets are mutually compatible; (iii) that monitoring methods are consistent so as to facilitate comparability of monitoring results, and by doing so (iv) that relevant transboundary impacts and transboundary features are taken into account. To this effect, the North-East Atlantic Environment Strategy will be implemented to facilitate delivery and evaluation of progress towards good environmental status as laid down in the MSFD, taking account of the national obligations under the Directive. Within the context of the OSPAR Commission, Contracting Parties will have coordinated under the thematic strategies in Part II and the Joint Assessment and Monitoring Programme:

- a. by 2012, their determination of a set of characteristics for good environmental status for the marine waters and their environmental targets and associated indicators, using Ecological Quality Objectives, where applicable, and other existing tools as appropriate;
- b. by 2014, their monitoring programmes for the ongoing assessment of the environmental status of their marine waters feeding into the review by the OSPAR Commission of the Joint Assessment and Monitoring Programme by 2014;
- c. by 2015, the identification of their programmes of measures in order to maintain or achieve good environmental status in their marine waters throughout the OSPAR maritime area;
- d. by 2018, the first review by the relevant Contracting Parties of the initial assessment of their marine waters, their descriptions of good environmental status, and their environmental targets and associated indicators.

1.5 The OSPAR Commission will also cooperate with the bodies implementing the Barcelona, Bucharest and Helsinki Conventions, in particular with the view to sharing best practice in monitoring and assessment frameworks in Europe and to facilitating comparison of the extent to which good environmental status is being achieved.

1.6 In line with Article 4 of Annex V to the OSPAR Convention, the OSPAR Commission will draw questions relating to the management of fisheries and maritime transport to the attention of the authority or international body competent for this question, such as Regional Fisheries Management Organisations, the International Maritime Organization (IMO) and relevant EU bodies. The OSPAR Commission will endeavour to cooperate with those authorities or international bodies through actions within its competence.

1.7 The OSPAR Commission will monitor and assess the nature, rate and extent of the effects of climate change and ocean acidification on the marine environment and consider appropriate ways of responding to those developments. Considerations of the impacts of climate change and ocean acidification, as well as the need for adaptation and mitigation, will be integrated in all aspects of the work. The OSPAR Commission will work with partner organisations (such as the International Council for Exploration of the Sea (ICES), the Intergovernmental Oceanographic Commission (IOC) and the Arctic Council) to enhance the knowledge on these issues.

1.8 The OSPAR Commission will continue to identify "emerging pressures" with the aim to understand the nature of any such pressures, assess their impact and advocate intervention, as appropriate.

1.9 The OSPAR Commission will, as appropriate, contribute to, and regionally implement, the work required by international legal frameworks and various ongoing initiatives at the global level (e.g. under

UNCLOS, the Convention on Biological Diversity (CBD) and the London Convention and its Protocol) and encourage other competent international organisations to work collectively and in partnership towards a common agenda of clean, healthy and biologically diverse oceans and seas, used sustainably.

2. Objectives for a clean, healthy and biologically diverse North-East Atlantic

Overall goal

2.1 Using the Ecosystem Approach to manage human activities affecting the maritime area, the overall goal of the OSPAR Commission is to conserve marine ecosystems and safeguard human health and, when practicable, restore marine areas which have been adversely affected in the North-East Atlantic by preventing and eliminating pollution and by protecting the maritime area against the adverse effects of human activities.

Strategic objectives

2.2 To deliver this, the strategic objectives of the OSPAR Commission are:

- to halt and prevent by 2020 further loss of *biodiversity* in the OSPAR maritime area, to protect and conserve ecosystems, and to restore, where practicable, marine areas which have been adversely affected;
- to combat *eutrophication* in the OSPAR maritime area, with the ultimate aim to achieve and maintain a healthy marine environment where anthropogenic eutrophication does not occur;
- to prevent pollution of the OSPAR maritime area by continuously reducing discharges, emissions and losses of *hazardous substances*, with the ultimate aim to achieve concentrations in the marine environment near background values for naturally occurring substances and close to zero for man-made synthetic substances;
- to prevent and eliminate pollution and take the necessary measures to protect the OSPAR maritime area against the adverse effects of *offshore oil and gas activities* by setting environmental goals and improving management mechanisms, so as to safeguard human health and to conserve marine ecosystems and, when practicable, restore marine areas which have been adversely affected;
- to prevent pollution of the OSPAR 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;
- to ensure integrated management of human activities in order to reduce impacts on the marine environment, taking into account the impacts of, and responses to, climate change and ocean acidification;
- to facilitate and coordinate the work of relevant Contracting Parties in achieving good environmental status under the EU Marine Strategy Framework Directive by 2020.

2.3 For each of the strategic objectives, specific operational objectives are described in the thematic strategies in Part II of this document. Measurable indicators and targets will be developed and implemented, either by Contracting Parties or, where appropriate, within the OSPAR Commission, to assess status and progress towards objectives for both the OSPAR Commission and the EU Marine Strategy Framework Directive, based where appropriate on the European Commission Decision on criteria on good environmental status under Article 9(3) of the EU Marine Strategy Framework Directive and the Ecological Quality Objectives for the North Sea.

3. Guiding Principles

3.1 The implementation of the North-East Atlantic Environment Strategy will be guided by the following principles:

- a. the precautionary principle;
- b. the polluter pays principle;
- c. the application of best available techniques and best environmental practice, including, where appropriate, clean technology;
- d. the principle of sustainable development through the application of the Ecosystem Approach;
- e. the principle that preventive action should be taken;
- f. the principle that environmental damage should as a priority be rectified at source.

4. Implementing the Ecosystem Approach

4.1 The implementation of the Ecosystem Approach will take place within the framework of the obligations and commitments of the various Contracting Parties, individually or jointly, in this field, such as under the EU Marine Strategy Framework Directive, and through cooperation with other relevant competent authorities and collaboration with relevant scientific institutes and organisations.

Objective

4.2 The OSPAR Commission will continue to progressively implement the Ecosystem Approach to the management of human activities in order to reduce impacts on the marine environment, taking into account all pressures from human activities on the marine environment, including impacts of, and responses to, climate change and ocean acidification.

Main strategic directions

4.3 The OSPAR Commission will implement the Ecosystem Approach through a continuous cycle of steps of (i) setting and coordinating ecological objectives and associated targets and indicators, (ii) ongoing management, and (iii) regular update of ecosystem knowledge, research and advice. Monitoring and assessment, as well as adaptive management, are essential elements for implementing the Ecosystem Approach. Adaptive management requires the application of the precautionary principle so that measures are taken when cause-effect relationships are not yet fully established scientifically, and modified when more knowledge becomes available.

4.4 In support of implementing the Ecosystem Approach to the management of human activities, the OSPAR Commission will:

- a. set and/or coordinate environmental objectives and targets to conserve the ecosystems and the biological diversity of the OSPAR maritime area and protect them from the adverse effects of human activities;
- b. develop an improved and comprehensive set of indicators on main pressures and ecosystem components, building on the qualitative descriptors for good environmental status of the EU Marine Strategy Framework Directive as well as, where relevant, the Ecological Quality Objectives for the North Sea, in order to enable regular regional assessments of ecosystem functioning and cumulative impacts of human activities on ecosystem health;
- c. develop monitoring programmes and assessment methodologies, which integrate existing thematic assessment frameworks with new tools for assessing ecosystem health;
- d. develop, and encourage application of, regionally coordinated tools for the implementation of integrated management of human activities and ecosystems. This includes tools such as marine spatial planning, integrated coastal zone management and cumulative impact assessment;

- e. develop methodologies, including social and economic analysis of the use of the OSPAR maritime area, to support evaluations whether the North-East Atlantic is used sustainably;
- f. strengthen the OSPAR network of marine protected areas recognising their contribution to the maintenance of ecosystem integrity and resilience against human activities and impacts of climate change and ocean acidification;
- g. ensure adaptive management through improved management mechanisms, including a mechanism to audit the different steps of the management cycle within and across OSPAR's thematic strategies;
- h. ensure working structures and procedures which support integration of knowledge and activities across OSPAR's thematic strategies;
- i. continue to invite its observer organisations to take active part in all its work strands, and strengthen stakeholder involvement where and when deemed necessary. The Contracting Parties will ensure that they involve relevant stakeholders in the development of their national approaches to sustainable uses of the seas.

4.5 The OSPAR Commission will pursue the implementation of its strategies in Part II, 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.

5. Joint assessment and monitoring

5.1 The implementation of the North-East Atlantic Environment Strategy should take due account of Article 24 of the OSPAR Convention on regionalisation and Annex IV to the OSPAR Convention on the assessment of the quality status of the marine environment of the OSPAR maritime area.

5.2 The OSPAR Commission will use its Joint Assessment and Monitoring Programme (JAMP) (OSPAR Agreement 2010-4) to develop the means to review progress achieved through this Strategy in order to assess from time to time whether any changes to the Strategy are needed. Contracting Parties will cooperate under the JAMP in carrying out monitoring programmes and in undertaking joint assessments of the overall quality status of the maritime area, its regions and sub-regions to support the implementation of the Ecosystem Approach.

5.3 In the period 2010–2014, the JAMP will be primarily oriented at supporting the activities of Contracting Parties in respect of the EU Marine Strategy Framework Directive. A revised JAMP will be developed by 2014 to set out the programme for the period 2015–2020. The JAMP will be reviewed annually and, as necessary, revised to ensure that it fully supports the delivery of the North-East Atlantic Environment Strategy and the interaction, as needed, with the EU Marine Strategy Framework Directive.

PART II – THE THEMATIC STRATEGIES

Biological Diversity and Ecosystems

1. Objectives

1.1 The OSPAR Commission's strategic objective with regard to biodiversity and ecosystems is to halt and prevent by 2020 further loss of biodiversity in the OSPAR maritime area, to protect and conserve ecosystems and to restore, where practicable, marine areas which have been adversely affected.

1.2 To this end, the OSPAR Commission will:

- a. improve the status of threatened and/or declining species and habitats, in particular of those on the OSPAR List, and ensure that they are effectively conserved, working, where appropriate, with other competent authorities;
- b. further OSPAR's work on marine protected areas with the view of achieving a network of marine protected areas which:
 - i. by 2012 is ecologically coherent, includes sites representative of all biogeographic regions in the OSPAR maritime area, and is consistent with the CBD target for effectively conserved marine and coastal ecological regions³;
 - ii. by 2016 is well managed (i.e. coherent management measures have been set up and are being implemented for such MPAs that have been designated up to 2012);
- c. aim to ensure that the effects of human activities and pressures on the marine environment, individually or cumulatively, do not adversely affect species, habitats and ecosystems, in particular those on the OSPAR List of Threatened and/or Declining Species and Habitats;
- d. substantially reduce marine litter in the OSPAR maritime area to levels where properties and quantities of marine litter do not cause harm to the coastal and marine environment;
- e. endeavour to keep the introduction of energy, including underwater noise, at levels that do not adversely affect the marine environment in the OSPAR maritime area;
- f. endeavour to limit the introduction of non-indigenous species by human activities to levels that do not adversely alter the ecosystems.

2. Guiding principles

2.1 When making assessments and adopting programmes and measures in relation to biodiversity and ecosystems, the Contracting Parties will be guided by the general principles described in section 3 of Part I.

3. Main strategic directions

3.1 To achieve its objectives and in accordance with the findings of the Quality Status Report 2010, the OSPAR Commission will focus on the following main strategic directions in the period up to 2020:

- a. ensuring the protection and conservation of biodiversity and ecosystem functioning throughout the OSPAR maritime area and, when practicable, restoring marine areas which have been adversely affected. This will be done through the further development and implementation of appropriate programmes and measures within the sphere of competence of the OSPAR

³ Target 1.1 coastal and marine biodiversity in Annex IV of UNEP/CBD/COP/DEC/VIII/15.

Commission and, where necessary, engagement and technical cooperation with other authorities;

- b. further developing the OSPAR network of marine protected areas, including in areas beyond national jurisdiction, ensuring that the network is ecologically coherent in the OSPAR maritime area and that effective management is in place at all sites;
- c. integrated management of human activities, through, among other measures, the further development and implementation of tools such as marine spatial planning, impact assessment and socio-economic assessment, in order to achieve the reduction in pressures which are adversely affecting the marine environment, and the sustainable use of ecosystem goods and services;
- d. regional, coordinated development of monitoring and assessment of marine biodiversity and ecosystem functioning, including the individual and cumulative pressures and environmental impacts from human activities and climate change and ocean acidification.

4. Time frame and implementation

4.1 The Biodiversity and Ecosystems Strategy will be implemented and further developed in line with the OSPAR Commission's commitments to an Ecosystem Approach. The Joint Assessment and Monitoring Programme and the periodic Programmes of Work will establish priorities, assign tasks, and set appropriate deadlines for completing these tasks, consistent with the EU Marine Strategy Framework Directive.

4.2 For the implementation of this Strategy the OSPAR Commission will:

Monitoring and assessment

- a. continue to monitor and assess, in accordance with the criteria of Appendix 3 to the 1992 OSPAR Convention and with the Joint Assessment and Monitoring Programme, the effects of human activities and pressures, individually and cumulatively, on the marine environment, biodiversity and ecosystem functioning;
- b. by 2013, agree on an overall assessment process for marine biodiversity and ecosystem functioning, and develop and agree by 2014 a coordinated monitoring programme for the ongoing assessment of the environmental status with regard to biodiversity and ecosystem functioning in the OSPAR maritime area;
- c. assess, based on monitoring data, the current and future impacts of climate change and ocean acidification on species, habitats and ecosystem functioning; establish the timescale(s) for such impacts to take effect and their possible extent; and consider management options suitable for mitigation of, and adaptation to, such impacts;

Targeted actions for the protection and conservation of species, habitats and ecosystem processes

- d. undertake the following actions in further developing appropriate measures for the protection of threatened and/or declining species and habitats on the OSPAR List of Threatened and/or Declining Species and Habitats ("the OSPAR List"), in order to improve their status and to ensure they are effectively conserved:
 - (i) identify targeted protective measures for species and habitats included in the OSPAR List on the basis of information contained in the OSPAR background documents for species and habitats, the report of the OSPAR Workshop on defining actions and measures for the threatened and/or declining species listed by OSPAR (Paris, 2009), and any other sources considered relevant;

- (ii) develop and adopt as soon as possible, but no later than by 2013, OSPAR programmes and measures (Decisions or Recommendations and guidance) aimed at improving the protection of the species and habitats on the OSPAR List, or groups thereof, outlining those targeted actions that should be taken by Contracting Parties and the OSPAR Commission;
 - (iii) bring to the attention of relevant competent authorities and international bodies those protective measures that the OSPAR Commission considers necessary and which fall within the competence of those authorities and international bodies;
 - (iv) evaluate by 2016 whether actions and measures being taken are adequate to achieve the objective set out in § 1.2(a), taking into account those being taken by the OSPAR Commission and other competent authorities and international bodies;
 - (v) review the OSPAR List with a view to removing any species or habitats that no longer meet the criteria for listing and adding new species and habitats that fulfil the criteria. Identify any new programmes or measures required to ensure improved conservation status of species and habitats contained within such a revised list;
- e. strengthen knowledge of ecosystem integrity and resilience of the components of marine biodiversity.

Marine protected areas (MPAs)

- f. undertake the following actions in further developing an ecologically coherent OSPAR network of well-managed marine protected areas ("the OSPAR Network") to complement the actions of Contracting Parties under the revised OSPAR Recommendation on a Network of Marine Protected Areas:
- (i) identify, on the basis of reports from Contracting Parties and observer organisations, further possible components of the OSPAR Network in areas beyond national jurisdiction in order to achieve the purposes of the network, as described in paragraph 2.1 of OSPAR Recommendation 2003/3 and taking due account of guidance provided in the OSPAR agreements 2003-17 (selection of MPAs) and 2006-3 (coherent network of MPAs);
 - (ii) in accordance with UNCLOS, and in consultation with the relevant competent international organisations, develop and implement the management framework adopted by the OSPAR Commission for those MPAs in areas beyond national jurisdiction already included in the OSPAR Network and, if appropriate, consider how such protection could be achieved for any further areas identified under (i) and how to integrate such areas into the network;
 - (iii) evaluate in 2012 whether the components of the OSPAR Network that have been selected by that date fulfil the OSPAR target at § 1.2(b), the commitment of the World Summit on Sustainable Development (WSSD) of representative networks, and the target of the Convention on Biological Diversity to have at least 10 per cent of each of the world's marine and coastal ecological regions effectively conserved;
 - (iv) identify any gaps which need to be filled, especially in offshore areas and areas beyond national jurisdiction, in order to achieve, by 2012, an ecologically coherent OSPAR Network and maintain it thereafter, and take steps towards filling any such gaps in areas beyond national jurisdiction as soon as possible;
 - (v) evaluate by 2016, whether OSPAR MPAs are well-managed, working, where relevant, in cooperation with competent authorities;

- (vi) if so requested by a Contracting Party concerned, consider whether any action by the OSPAR 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.

Management of human activities in the context of Annex II and Annex V/Appendix 3 to the OSPAR Convention

- g. on the basis of continued monitoring and assessment of human activities, keep under review, and, if necessary, draw up, programmes and measures for the management of human activities with a view to:
 - (i) controlling the effects of human activities and pressures, individually and cumulatively, on the marine environment, and;
 - (ii) restoring, where practicable, marine areas which have been adversely affected.

Management of human activities in the context of Article 4 of Annex V to the OSPAR Convention

- h. collaborate and exchange information (e.g. on vulnerable marine ecosystems) with fisheries management authorities, advisory organisations, the fishing industry and other relevant stakeholders, so as to promote and support the integration of fisheries management with ecosystem-based management of the North-East Atlantic, the sustainable management of fisheries consistent with OSPAR Ecological Quality Objectives, and an improved assessment of fisheries which supports measures to achieve good environmental status;
- i. encourage the ratification, implementation and enforcement of relevant instruments of the IMO, and collaborate with the IMO and other competent organisations and relevant stakeholders (e.g. Bonn Agreement and North Sea Network of Prosecutors and Investigators) on actions addressing impacts of maritime transport on the marine environment.⁴

Management of specific human pressures

- j. develop appropriate programmes and measures to reduce amounts of litter in the marine environment and to stop litter entering the marine environment, both from sea-based and land-based sources, to complement the actions of Contracting Parties such as under OSPAR Recommendation 2010-XX on the reduction of marine litter through the implementation of 'Fishing for Litter' initiatives, including:
 - (i) by 2012, based on an evaluation of progress made and available data, establish regionally⁵ coordinated targets for marine litter;
 - (ii) by 2014, a coordinated monitoring programme for marine litter;
 - (iii) promotion of research to improve the evidence base with respect to impact of litter, including micro-particles, on the marine environment;
- k. foster, in cooperation with the North Sea Network of Investigators and Prosecutors, enforcement and prosecution of offences under Annex V on garbage to the International Convention for the Prevention of Pollution from Ships (MARPOL 73/78 Convention);
- l. consider, identify and implement appropriate measures for the reduction of the adverse effects of underwater noise on the marine environment.

⁴ This includes actions addressing the 'clean ship approach', air pollution (e.g. NO_x, SO_x), ship noise and ship strikes, the introduction and spread of non-indigenous species, effective port waste reception facilities, pollution prevention, preparedness and response, and transboundary enforcement and prosecution of maritime pollution offences.

⁵ "Sub-regionally" for the purposes of the Marine Strategy Framework Directive.

Integrating management actions

- m. further develop appropriate measures, in line with the Ecosystem Approach as set out in section 4 of Part I, to facilitate marine spatial planning in the OSPAR maritime area, including:
 - (i) cooperation on transboundary issues that are arising from marine spatial planning;
 - (ii) where necessary, additional mechanisms for transnational consultations on marine spatial plans and issues arising from them;
 - (iii) region-specific, tailor-made approaches to applying marine spatial planning to support the Ecosystem Approach;
 - (iv) exchange of best practices and experiences with regard to marine spatial planning.
- n. further develop cumulative effect assessment methodologies to support the implementation of the Ecosystem Approach and facilitate the fulfilment of requirements under the EU Marine Strategy Framework Directive, particularly in relation to the assessment of biodiversity and ecosystem functioning;
- o. by 2012, prepare an economic and social analysis of the uses of the OSPAR maritime area and of the cost of degradation of the marine environment, consistent with the requirements of the EU Marine Strategy Framework Directive.

5. Interrelations with other international institutions

5.1 The implementation of the Biodiversity and Ecosystems 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 the obligations of EU Member States and, in some cases, the states of the European Economic Area (EEA) to implement measures under the EU Marine Strategy Framework Directive (2008/56/EC), the Water Framework Directive (2000/60/EC), the Habitats Directive (92/43/EEC), the Birds Directive (2009/147/EC) and the Port Waste Reception Facilities Directive (2000/59/EC).

5.2 To promote consistency, other relevant measures which have been agreed or are being negotiated by some or all Contracting Parties in other forums are taken into account in the light of their applicability to different geographical areas. Such measures are taken under the Bern Convention, the Bonn Convention (including its regional agreements) and the Ramsar Convention, the Convention on Biological Diversity, the Helsinki Convention, the Barcelona Convention, the International Commission for the Conservation of Atlantic Tunas, the North Atlantic Salmon Conservation Organisation, the Bucharest Convention, the Bonn Agreement, the Lisbon Agreement when entered into force, the Arctic Council, the Trilateral Wadden Sea Cooperation and the International Conferences on the Protection of the North Sea.

5.3 The OSPAR Commission will cooperate:

- a. with other competent authorities, as stipulated in the Memorandum of Understanding between the OSPAR Commission and the North-East Atlantic Fisheries Commission, the Memorandum of Understanding between the OSPAR Commission and the International Seabed Authority, and the Agreement of Cooperation between the International Maritime Organization and the OSPAR Commission, and will endeavour to establish further cooperation arrangements with other relevant international organisations, as appropriate;
- b. with relevant scientific institutions including the International Council for the Exploration of the Sea (ICES) and the European Environment Agency (EEA).

Eutrophication⁶

1. Objectives

1.1 The OSPAR Commission's strategic objective with regard to eutrophication is to combat eutrophication in the OSPAR maritime area, with the ultimate aim to achieve and maintain a healthy marine environment where anthropogenic eutrophication does not occur.

1.2 The Eutrophication Strategy will be implemented progressively by making every endeavour, through appropriate actions and measures, to move towards the targets of:

- a. achieving that human-induced eutrophication is minimised, especially the adverse effects thereof, such as losses in biodiversity, ecosystem degradation, harmful algae blooms and oxygen deficiency in bottom waters, and finally;
- b. achieving and maintaining, by 2020, that all parts of the OSPAR maritime area have the status of non-problem area.

2. Guiding principles

2.1 When making assessments and adopting programmes and measures in relation to eutrophication, the Contracting Parties will be guided by the general principles described in section 3 of Part I. In addition, the actions to implement the Eutrophication Strategy should comprise a combination of a target-oriented and source-oriented approach to combat eutrophication.

3. Main strategic directions

3.1 To achieve its objectives and in accordance with the findings of the Quality Status Report 2010, the OSPAR Commission will carry out, in the period up to 2020, effective regional, coordinated monitoring and assessment in order to evaluate the extent of eutrophication problems in the OSPAR maritime area, taking into account any additional impacts linked to climate change, and to identify actions needed to achieve non-problem area status, and to make progress towards good environmental status and good ecological status as defined under the EU Marine Strategy Framework Directive and the Water Framework Directive respectively.

3.2 To this end, the OSPAR Commission will focus on the following main strategic directions:

- a. ensure that the regional monitoring and assessment requirements of the Marine Strategy Framework Directive, using its relevant methodological standards and criteria and associated coordination activities, are fulfilled by the Eutrophication Monitoring Programme and the Common Procedure for the identification of the eutrophication status of the OSPAR maritime area ("the Common Procedure");
- b. evaluate and report on the effectiveness of measures addressing eutrophication problems;
- c. cooperate to set appropriate nutrient reduction targets for problem areas;
- d. coordinate the development of measures to reduce and ultimately eliminate anthropogenic eutrophication in marine waters.

⁶ A number of terms used in this strategy are defined at Annex 1.

4. Timeframe and implementation

4.1 The Eutrophication Strategy will be implemented and further developed in line with the OSPAR Commission's commitments to an Ecosystem Approach and detailed in the Joint Assessment and Monitoring Programme and the periodic Programmes of Work, which will establish priorities, assign tasks and set appropriate deadlines for completing these tasks.

4.2 The OSPAR Commission will assess the extent of eutrophication in the OSPAR maritime area under the Common Procedure and the effectiveness of implemented measures on the quality status of the marine ecosystems, and evaluate, from time to time, through model scenarios of nutrient reductions the situation in the OSPAR maritime area that is expected following the implementation of measures. Building on the QSR 2010 and future eutrophication assessments, the following actions are required:

- a. When and where it is established that an area has achieved non-problem area status, measures should be kept at a level that ensures that this status is maintained;
- b. In the case of potential problem areas, preventive measures should be taken in accordance with the precautionary principle.

There should be urgent implementation of monitoring and research in order to enable a full assessment of the eutrophication status and their final classification as problem or non-problem area by 2014;

- c. In the case of problem areas, measures shall be taken to reduce or to eliminate the anthropogenic causes of eutrophication.

4.3 In support of this, the OSPAR Commission will:

- a. further develop its tools for monitoring and assessing the eutrophication status of the OSPAR maritime area and progress towards the objectives of this strategy, and adopt a revised Common Procedure at the latest by 2013;
- b. promote the use of modelling and remote sensing to improve the knowledge on the extension and impact of eutrophication on marine ecosystems within the OSPAR Regions;
- c. adopt an integrated assessment of the eutrophication status of the maritime area in time to support Contracting Parties' reporting obligations under the Water Framework Directive in 2015;
- d. review the situation of nutrient inputs for eutrophication problem areas and coordinate with Contracting Parties, by 2012, the setting of nutrient reduction targets required for the eutrophication problem areas to move to non-problem area status. Recognising that approaches may differ according to size and nature of catchments contributing to eutrophication problem areas, the OSPAR Commission will:
 - (i) by 2011, quantify the reduction of nutrients to the maritime area required for individual eutrophication problem areas to achieve non-problem area status;
 - (ii) by 2012, identify and quantify the main contributing sources for individual eutrophication problem areas and river basins, including transboundary nutrient loads;
 - (iii) by 2013, implement a revised reporting system for nutrients which coordinates data collection on sources, pathways and environmental status;
- e. improve knowledge about interactions of eutrophication with climate change and, where possible, consider impacts of climate change in monitoring and assessing eutrophication;
- f. promote consideration of marine eutrophication to be taken into account in:
 - (i) setting emission targets for nitrogen under the EU National Emission Ceilings Directive and the Gothenburg Protocol to the UNECE Convention on Long-Range Transboundary Air Pollution (LRTAP);

- (ii) the revision of standards for ship emissions of the International Maritime Organisation (IMO);
- g. carry out an assessment of the impact of shipping on the eutrophication status of the North Sea and, if decided by the OSPAR Commission, elaborate a document, in line with Appendix III to Annex VI to the MARPOL 73/78 Convention, providing the basis for a joint submission to IMO justifying the case for designating the North Sea as a NO_x Emission Control Area.

4.4 The Eutrophication Strategy will support the implementation of the EU Water Framework Directive by feeding the programmes of measures identified under § 4.3(c) into the first review of the river basin management plans under the Directive.

4.5 Contracting Parties that are likely, directly or indirectly, to contribute nutrient inputs to problem areas will:

- a. where national obligations exist under EU legislation, fully implement the Marine Strategy Framework Directive and the Water Framework Directive and associated legislation (e.g. the Nitrates Directive, the Urban Waste Water Treatment Directive and the IPPC Directive) in order to reduce nutrient discharges to water and emissions to air, supported e.g. by the Rural Development Regulation (EC) No 1698/2005. In implementing those measures, Contracting Parties will take into account marine eutrophication;
- b. continue to implement PARCOM Recommendation 88/2 on the reduction in inputs of nutrients to the Paris Convention area and to reduce nutrient inputs to eutrophication problem areas by 50% relative to input levels in 1985, until new nutrient reduction targets are set under § 4.3(c) for problem areas to move to non-problem area status;
- c. where no national obligations exist to implement more specific EU legislation, continue to implement PARCOM Recommendation 92/7 on the reduction of nutrient inputs from agriculture into areas where these inputs are likely, directly or indirectly, to cause pollution, and PARCOM Recommendation 89/4 on a coordinated programme for the reduction of nutrients;
- d. take additional measures, if necessary, to address relevant sources contributing to problem areas. Such further measures should take into account their feasibility, cost-effectiveness, and region-specific and seasonal factors.

5. Interrelation with other international institutions

5.1 The implementation of the Eutrophication 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 obligations of EU Member States and, in some cases, the states of the European Economic Area (EEA) to implement measures under the EU Marine Strategy Framework Directive (2008/56/EC), the EU Water Framework Directive (2000/60/EC), and other relevant EU legislation to reduce nutrient discharges to water and emissions to air from point sources and diffuse sources (e.g. agriculture), including the National Emission Ceilings Directive (2001/81/EC), the Urban Waste Water Treatment Directive (91/271/EEC), the Nitrates Directive (91/676/EEC) and the Integrated Pollution Prevention Control (IPPC) Directive (2008/1/EC) and the Rural Development Regulation (EC) No 1698/2005;
- b. measures stipulated in the Protocol Concerning the Control of Emissions of Nitrogen Oxides or their Transboundary Fluxes adopted within the framework of the UNECE Convention on Long-Range Transboundary Air Pollution (LRTAP), and;
- c. measures stipulated in the MARPOL 73/78 Convention.

Hazardous substances⁷

1. Objectives

1.1 The OSPAR Commission's strategic objective with regard to hazardous substances is to prevent pollution of the OSPAR maritime area by continuously reducing discharges, emissions and losses of hazardous substances (as defined in Annex 1), with the ultimate aim to achieve concentrations in the marine environment near background values for naturally occurring substances and close to zero for man-made synthetic substances.

1.2 The Hazardous Substances Strategy will be implemented progressively by making every endeavour, through appropriate actions and measures:

- a. to achieve concentrations of contaminants at levels not giving rise to pollution effects, and contaminants in fish and other seafood for human consumption not exceeding levels established by EU legislation or other relevant standards, and finally;
- b. to move towards the targets of the cessation of discharges, emissions and losses of hazardous substances by the year 2020.

2. Guiding principles

2.1 When making assessments and adopting programmes and measures in relation to hazardous substances, the Contracting Parties will be guided by the general principles described in section 3 of Part I. In addition:

- a. the principle of substitution, *i.e.* the substitution of hazardous substances by less hazardous substances or preferably non-hazardous substances where such alternatives are available⁸, will apply;
- b. 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;
- c. the scientific assessment of risks should be used as a tool for setting priorities and developing action programmes.

3. Main strategic directions

3.1 To achieve its objectives and in accordance with the findings of the Quality Status Report 2010, the OSPAR Commission will focus on the following main strategic directions in the period up to 2020:

- a. maintain the OSPAR List of Chemicals for Priority Action and associated Background Documents, and the OSPAR List of Substances of Possible Concern and retain the option to work on specific hazardous substances not covered within the EU framework which are assessed as being of concern for the marine environment;
- b. carry out regional data collections to quantify sources, releases and pathways of hazardous substances on the List of Chemicals for Priority Action ("OSPAR priority chemicals");
- c. carry out effective regional, coordinated monitoring and assessment to evaluate the extent of contamination with hazardous substances covered by the Joint Assessment and Monitoring Programme and their effects in the OSPAR maritime area, taking into account any additional

⁷ A number of terms used in this strategy are defined at Annex 1.

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.

impacts linked to climate change, and to identify actions to be taken, so as to make progress towards good environmental status and good chemical status under the EU Marine Strategy Framework Directive and the Water Framework Directive respectively;

- d. promote actions to address concerns about chemicals, including endocrine disruptors, through the EU and other relevant international organisations, and act if these concerns are not fully addressed by those organisations.

4. Timeframe and implementation

4.1 The Hazardous Substances Strategy will be implemented and further developed in line with the OSPAR Commission's commitments to an Ecosystem Approach and detailed in the Joint Assessment and Monitoring Programme and the periodic Programmes of Work, which will establish priorities, assign tasks and set appropriate deadlines for completing these tasks. The implementation of the strategy is supported by the actions relating to the use of chemicals under the Offshore Oil and Gas Industry Strategy and pollution control for other relevant sea-based human activities under the Biological Diversity and Ecosystems Strategy.

4.2 The Strategy will support the implementation of the EU Water Framework Directive by feeding the programmes of measures identified under § 3.1(c) into the first review of the river basin management plans under the Directive.

4.3 In addition, the OSPAR Commission will:

- a. maintain the List of Chemicals for Priority Action and the List of Substances of Possible Concern, through consideration of new information on substances already on those OSPAR Lists or information on other substances of concern for the marine environment. Based on suitable evidence, the OSPAR Commission will assess whether
 - (i) to select a substance for priority action and to take measures, as appropriate, where that substance is not prioritised for action or not listed as of possible concern by the OSPAR Commission and is not fully addressed under relevant EU initiatives;or
 - (ii) to deselect a substance from the OSPAR Lists where that substance does not fulfil the criteria for being on those lists.
- b. maintain the Background Documents for OSPAR priority chemicals;
- c. actively generate input to the EU and other international organisations on the identification, selection and prioritisation of hazardous substances which are of concern for the marine environment;
- d. further support initiatives, for example through the input of relevant information and assessments,
 - (i) by the EU under the REACH Regulation and other relevant EU legislation to reduce releases of priority chemicals from products and wastes and to control risks for the marine environment;
 - (ii) in the UN framework on the phase out of additional persistent organic pollutants and a global legally binding instrument on mercury;
- e. further develop existing monitoring and assessment tools to evaluate progress towards achieving the objectives of the Hazardous Substances Strategy by:

- (i) improving information collection on the production, uses and pathways to the marine environment of hazardous substances, especially for substances which are not deemed suitable for marine monitoring;
- (ii) redesigning marine monitoring of priority chemicals under OSPAR's existing monitoring programme to reach better regional coverage;
- (iii) improving methods for marine biological effects monitoring, where appropriate integrated with chemical monitoring;
- (iv) improving the understanding of the effects of hazardous substances on marine ecosystems, particularly cumulative effects and endocrine disruption.

4.4 In support of OSPAR's objectives for hazardous substances, Contracting Parties will:

- a. where national obligations exist under EU legislation, fully implement existing obligations, in particular those required under the Marine Strategy Framework Directive (2008/56/EC), the Water Framework Directive (2000/60/EC) and its daughter directive on priority substances (2008/105/EC), and other relevant EU legislation to prevent and eliminate emissions, discharges and losses of hazardous substances from point sources and diffuse sources (e.g. products) and to control their risks, including the Integrated Pollution and Prevention Control (IPPC) Directive (2008/1/EC), and the REACH Regulation (EC) No 1907/2006, together with the EU Chemicals Strategy and Directives on cosmetics (76/768/EEC), pesticides (91/414/EEC), biocides (98/8/EC), pharmaceuticals (75/319/EEC) and veterinary medicine (81/851/EEC);
- b. where no national obligations exist under EU legislation, implement adequate measures adopted at international level or within the framework of national legislation and continue to implement existing OSPAR measures with regard to hazardous substances;
- c. take additional measures, if necessary, to reduce pollution with OSPAR priority chemicals at source.

4.5 Taking into account the increased environmental awareness, Contracting Parties should encourage industry to help achieving OSPAR's objectives for hazardous substances through:

- a. the incorporation, as a strategy, of the objective in their development of clean production and environmentally sound products, and in this context the promotion of "green chemistry", including:
 - (i) the development and use of less hazardous, or preferably non-hazardous, substances;
 - (ii) the development and use of practices during the manufacture, use and ultimate disposal of chemicals (whether as intermediates, products or residues), including waste handling and waste management techniques, that reduce, or preferably avoid, the use of hazardous substances and that avoid their discharges, emissions and losses to the environment;
 - (iii) the provision of alternatives to the use of hazardous substances in processes other than their manufacture;
- b. the provision of reliable data on properties, production volumes, use patterns, emission scenarios, and exposure concentrations of hazardous substances.

5. Interrelation with other international institutions

5.1 The implementation of the Hazardous Substances 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 the obligations of EU Member States, and in some cases the states of the European Economic Area (EEA), to implement measures under relevant EU legislation (cf. § 4.4(a)).

5.2 Considering that hazardous substances can reach the OSPAR maritime area from outside the area, for example through long-range air transport or imported products, and that international controls and approaches are necessary to address them:

- a. the implementation of this strategy will be supported by the obligations and commitments of the Contracting Parties under various international agreements, such as the UNECE Convention of Long-Range Transboundary Air Pollution (LRTAP), the UNEP Stockholm POPs Convention, the MARPOL 73/78 Convention and the Convention on the Control of Harmful Anti-fouling Systems on Ships;
- b. the OSPAR Commission will support the work of relevant international bodies (e.g. UNEP, UNECE, OECD and IMO) and countries in this regard;
- c. the OSPAR Commission will collaborate with the relevant international forums dealing with endocrine disruptors (e.g. OECD) with a view to optimising international research effort leading to the development of testing and assessment tools for identifying substances of concern and their occurrence and distribution and effects in the marine environment.

5.3 The OSPAR 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. The OSPAR Commission will invite industry to cooperate in fulfilling the objective of OSPAR with regard to hazardous substances.

Offshore Oil and Gas Industry

1. Objectives

1.1 The OSPAR Commission's strategic objective with regard to offshore oil and gas activities is to prevent and eliminate pollution and take the necessary measures to protect the OSPAR maritime area against the adverse effects of offshore activities⁹ by setting environmental goals and improving management mechanisms, 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 thematic strategies apply in so far as they relate to offshore activities.

1.3 The Offshore Oil and Gas Industry Strategy will be implemented progressively, through appropriate actions and measures, with the target:

- a. to achieve, by 2020, a reduction of oil in produced water discharged into the sea to a level which will adequately ensure that each of those discharges will present no harm to the marine environment;
- b. to have phased out, by 1 January 2017, the discharge of offshore chemicals that are, or which contain substances, identified as candidates for substitution, except for those chemicals where, despite considerable efforts, it can be demonstrated that this is not feasible due to technical or safety reasons (OSPAR Recommendation 2006/3).

1.4 The Offshore Oil and Gas Industry Strategy also covers activities to store CO₂ streams in geological formations with the objective to ensure that CO₂ streams are retained permanently in those formations and will not lead to significant adverse consequences for the marine environment, human health and other legitimate uses of the maritime area (OSPAR Decision 2007/2).

2. Guiding principles

2.1 When making assessments and adopting programmes and measures in relation to offshore oil and gas activities, the Contracting Parties will be guided by the general principles described in section 3 of Part I. In addition, assessments made and programmes and measures adopted to achieve the objective and implement this strategy will be in accordance with:

- a. the relevant provisions set out in Annex III to the OSPAR Convention. Consequently this 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;
- b. the relevant provisions of Annex V to the OSPAR Convention which will ensure the application of an integrated Ecosystem Approach;
- c. the waste management hierarchy of avoidance, reduction, re-use, recycling, recovery, and residue disposal.

3. Main strategic directions

3.1 To achieve its objectives and in accordance with the findings of the Quality Status Report 2010, the OSPAR Commission will focus, in the period up to 2020, on actions 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. In addition,

⁹ Defined in the OSPAR Convention as "activities carried out in the maritime area for the purpose of the exploration, appraisal or exploitation of liquid and gaseous hydrocarbons".

the OSPAR Commission will keep under review the need for actions to prevent other potential adverse effects from offshore activities on the ecosystems and biological diversity of the maritime area. The OSPAR Commission also recognises the need to pay particular attention to the decommissioning of redundant oil and gas installations as these activities increase.

3.2 To this end, the OSPAR Commission will focus on the following main strategic directions:

- a. carry out effective regional, coordinated information collection, environmental monitoring and assessment to evaluate the extent of pollution and other adverse effects of offshore oil and gas activities in all Regions of the OSPAR maritime area;
- b. assess the extent to which existing programmes and measures meet, or will meet, the objectives of the Offshore Oil and Gas Industry Strategy and the achieving or maintaining of good environmental status under the EU Marine Strategy Framework Directive;
- c. where necessary, revise existing measures and/or develop and adopt new measures, taking climate change impacts into account;
- d. continue efforts to reduce discharges of harmful substances, including oil, by developing and applying a harmonised method of assessing environmental risk (risk based approach) relating to the management of produced water, and phase out discharges of hazardous substances;
- e. with a view to progressively develop Best Available Techniques (BAT) and Best Environmental Practice (BEP) for environmental issues, promote the sharing of information and experience between Contracting Parties, non-governmental organisations and relevant research and development forums;
- f. assess the relevance for OSPAR work, including cooperation with the Bonn Agreement, of significant acute pollution events;
- g. continue to promote the use and implementation by the offshore oil and gas industry of environmental management mechanisms, including elements for auditing and reporting, which are designed to achieve both continuous improvement in environmental performance and to fulfil the objective of this strategy.

4. Timeframe and implementation

4.1 The Offshore Oil and Gas Industry Strategy will be implemented progressively and, in so far as they apply, following on and consistent with the commitments made in the other OSPAR thematic strategies. The strategy will be implemented in line with the OSPAR Commission's commitment to an Ecosystem Approach and detailed in the Joint Assessment and Monitoring Programme and the periodic Programmes of Work, which will establish priorities, assign tasks, and set deadlines.

4.2 The OSPAR Commission will keep under review and, where necessary, develop programmes and measures in respect of all phases of offshore activities, in accordance with the provisions of the OSPAR Convention and the findings in the QSR 2010, taking into account the development of programmes and measures (e.g. REACH) introduced by other international organisations. To this end, the OSPAR Commission will:

- a. continue the annual collection of data on use and discharges of offshore chemicals, emissions to air, spills, and discharges of oil and radioactive substances;
- b. by 2011, develop and implement a harmonised method of assessing environmental risk (risk based approach) relating to the management of produced water discharged from offshore installations;

- c. by 2011, encourage Contracting Parties to report on their reviews of their existing frameworks, investigate whether there are specific environmental issues relating to drilling activities in extreme conditions, taking into account external reviews, and, if required, develop appropriate measures;
- d. by 2011, review the phasing out of the discharge in the OSPAR maritime area of offshore chemicals that are, or which contain added substances, listed in the OSPAR List of Chemicals for Priority Action (OSPAR Recommendation 2005/2);
- e. continue efforts to phase out discharges of hazardous substances by implementing OSPAR Decision 2000/2 (as amended) 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, to harmonise with the relevant requirements of the REACH Regulation;
- f. by 2012, review the disposal of naturally occurring radioactive material in the form of low specific activity scales and sludges and, where appropriate, develop management measures to reduce the discharges of radioactive substances from offshore oil and gas activities;
- g. continue efforts to improve tools for environmental monitoring, data collection and assessment of the effects of discharges and emissions from offshore installations, including effects on ecosystems, in particular on threatened and/or declining species and habitats;
- h. further assess the impact of underwater noise from the offshore oil and gas industry in light of EU criteria and methodological standards for good environmental status and, as appropriate, develop guidance on best practice for its mitigation;
- i. assess the suitability of existing measures to manage oil and gas activities in Region I and, where necessary, offer to contribute to the work on offshore oil and gas activities taking place under the Arctic Council, specifically under the Protection of the Arctic Marine Environment Working Group (PAME);
- j. by 2012, investigate whether there are specific environmental issues relating to ageing installations and infrastructure and, if required, develop appropriate measures;
- k. in 2013, review and, if appropriate, amend the categories of disused offshore installations where derogations of OSPAR Decision 98/3 on the Disposal of Disused Offshore Installations may be considered;
- l. by 2014, reassess the possibilities of releases of oil and chemicals from any disturbance of cuttings piles and their potential impacts on the marine environment;
- m. continue monitoring the development of Carbon Capture and Storage (CCS) activities, including Contracting Parties' permits and approvals for CCS projects, to ensure that appropriate measures are in place.

5. Interrelation with other international institutions

5.1 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 those other forums (e.g. the European Community, the Bonn Agreement, the London Convention and its Protocol, the Helsinki Commission, the Arctic Council and other relevant regional organisations), are compatible with any relevant programmes and measures adopted by the OSPAR Commission.

Radioactive Substances¹⁰

1. Objectives

1.1 The OSPAR Commission's strategic objective with regard to radioactive substances is to prevent pollution of the OSPAR 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. radiological impacts on man and biota;
- b. legitimate uses of the sea;
- c. technical feasibility.

1.2 The Radioactive Substances Strategy will be implemented progressively by making every endeavour, through appropriate actions and measures to ensure that by the year 2020 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.

2. Guiding principles

2.1 When making assessments and adopting programmes and measures in relation to radioactive substances, including waste, the Contracting Parties will be guided by the general principles described in section 3 of Part I. In addition, the Contracting Parties will take account of:

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

3. Main strategic directions

3.1 To achieve its objectives and in accordance with the findings of the Quality Status Report 2010, the OSPAR Commission will, where appropriate, develop and maintain programmes and measures to identify, prioritise, monitor and control (*i.e.* 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.

3.2 To this end, the OSPAR Commission will focus on the following main strategic directions in the period up to 2020:

- a. continue monitoring programmes, to improve the evidence base and further develop assessment tools;
- b. monitor the international development of environmental quality criteria¹¹ to evaluate the impacts of discharges on the marine environment and adopt such criteria as they become established;

¹⁰ A number of terms used in this strategy are defined in Annex 1.

¹¹ E.g. the International Commission on Radiological Protection (ICRP), initiatives by the European Commission implementing the Euratom Treaty, and the International Atomic Energy Agency under its Plan of Activities on the Radiation Protection of the Environment.

- c. assess the contribution of the oil and gas industry to marine radioactive pollution and, where appropriate, develop and implement suitable management measures;
- d. continue to scrutinise the development in, and encourage Contracting Parties to apply, best available techniques to control (*i.e.* prevent and/or reduce and/or eliminate) discharges of radioactive substances from the nuclear and non-nuclear sectors.

4. Timeframe and implementation

4.1 The Radioactive Substances Strategy will be implemented and further developed in line with the OSPAR Commission's commitments to an Ecosystem Approach and according to the Joint Assessment and Monitoring Programme and the periodic Programmes of Work, which will establish priorities, assign tasks and set appropriate deadlines and targets. These commitments will concentrate on substances and human activities of the highest concern to the marine environment, as identified in the Third Periodic Evaluation of Progress (Publication number 455/2009), making best use of resources.

4.2 The OSPAR Commission will, by 2020, improve and further develop tools for data collection and assessment of progress towards the objectives of the Radioactive Substances Strategy, by the following actions:

- a. to apply statistical trend analysis techniques to assess progress in reduction of discharges, emissions and losses;
- b. by 2012, to review and if necessary, conclude on:
 - (i) an appropriate method of reporting exceptional discharges arising either from the decommissioning of nuclear installations or from operations to recover old waste; and
 - (ii) a method to take account of the variability in the level of operation of nuclear installations;
- c. by 2014, to develop agreed baseline values for discharges and concentrations, where possible, from the non-nuclear sector;
- d. by the time environmental quality criteria are established as referred to in § 3.2(b), to consider programmes and measures to apply such criteria;
- e. by 2018, to review progress with tritium abatement techniques that might allow further consideration of appropriate evaluation of tritium discharges through an agreed methodology.

4.3 The OSPAR Commission will continue monitoring programmes and annual data collection to improve the evidence base. The main actions are:

- a. to continue and improve the annual collection of data on discharges and concentrations from the non-nuclear sector;
- b. to continue to collect data and monitor discharges of the radionuclides from the nuclear sector;
- c. to establish routine monitoring and data collection of concentrations data and cooperate with the International Atomic Energy Agency (IAEA) in making such data available through the IAEA MARiS database;
- d. to assess the contribution of the non-nuclear sector, especially the oil and gas industry, to the pollution of the OSPAR area by radioactive substances.

4.4 The OSPAR Commission will assess the impacts to man and biota of:

- a. environmental concentrations of radionuclides associated with the nuclear industry in the OSPAR maritime area;
- b. discharges of radionuclides associated with the non-nuclear sectors in the OSPAR maritime area.

4.5 The OSPAR Commission will carry out periodical evaluations of progress as specified in the Joint Assessment and Monitoring Programme and assess 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.

4.6 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.

4.7 As a result of monitoring and assessment, the OSPAR Commission will identify and adopt relevant measures to deal with the problems, including:

- a. continuing to apply and further develop BAT to minimise discharges of radioactive substances from the nuclear sector;
- b. reviewing periodically the development of abatement techniques for tritium discharges;
- c. identifying appropriate management measures for the non-nuclear sources;
- d. addressing measures regarding radioactive substances from offshore oil and gas activities under the offshore industry strategy.

5. Interrelation with other international institutions

5.1 In implementing the Radioactive Substances Strategy, the OSPAR Commission will draw upon the work of and cooperate with relevant international organisations and agencies. The Commission will take account of relevant recommendations, methodologies and/or legally binding documents. Examples of relevant documents are the recommendations of the International Commission on Radiological Protection (ICRP), the Safety Standards Series of the International Atomic Energy Agency (IAEA), the Joint Convention on the Safety of Spent Fuel Management and the Safety of Radioactive Waste Management and the EURATOM Basic Safety Standards.

5.2 The OSPAR Commission and Contracting Parties, jointly or individually, should continue to encourage international organisations and agencies, such as the IAEA and the ICRP, to develop further the scientific tools for assessing radiation exposure and risk especially to marine organisms.

Definitions for the purposes of the North-East Atlantic Environment Strategy

Eutrophication

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

Hazardous Substances

1. For the purpose of the Hazardous Substances Strategy:
 - a. “hazardous substances”¹² are substances which fall into one of the following categories:
 - (i) substances or groups of substances that are toxic, persistent and liable to bioaccumulate;

¹² Substances which are hazardous solely because of their radioactive properties are not addressed by the Hazardous Substance Strategy but by the Radioactive Substances.

- (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 2005¹³, or any subsequent modification.
3. "Losses" are unintentional transfers of substances, other than as discharges, emissions or the result of accidents, directly or indirectly to the marine environment, which have, for example:
- a. leached, eroded or become detached from a manufactured product, waste or structure;
 - b. leached or run off from land on which it has been spread or deposited;
 - c. leaked or escaped from a container in which it has been kept.

Radioactive Substances

For the purposes of the Radioactive Substances Strategy:

- a. "Radioactive substances" mean naturally 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.

¹³ OSPAR Agreement 2005-9.

OSPAR's strategies and linkages with the descriptor on Good Environmental Status under the Marine Strategy Framework Directive (MSFD)

Qualitative descriptors for determining good environmental status under the MSFD	Biodiversity strategy	Hazardous substances strategy	Eutrophication strategy	Radioactive substances strategy ⁱ	Offshore oil and gas industry strategy
Biological diversity	X	X	X	X	X
Non-indigenous species	X				
Commercial fish	X				
Foodweb	X		X		
Eutrophication	X		X		
Seafloor integrity	X				X
Hydrographical alterations	X				
Contaminants (pollution)	X	X		X	X
Contaminants (human health)		X			
Litter	X	X			
Energy	X				X

ⁱ While discharges and emissions resulting from the use of radioactive material are not addressed by the Directive, radionuclides are subject to, *inter alia*, Article 8 of, and Table 2 of Annex III to, the Marine Strategy Framework Directive.