



OSPAR
COMMISSION

Existing OSPAR measures in support of MSFD
programmes of measures – ‘OSPAR acquis’



Existing OSPAR measures in support of MSFD programmes of measures – ‘OSPAR *acquis*’

1. Introduction

1. Since the mid-1970s the OSPAR Convention 1992 (including the former Oslo and Paris Conventions) has established internationally agreed measures for the purpose of the protection of the marine environment in the North East Atlantic (see section 1 in OSPAR, 2012).¹ This document on the Marine Strategy Framework Directive (MSFD) describes the ‘*acquis*’ of existing OSPAR measures as a contribution to the requirement in Article 13, MSFD, when Member States identify measures to achieve or maintain good environmental status, to take into account relevant measures required under international agreements. This regional cooperation on establishing programmes of measures is in line with Article 6 of the MSFD.

2. The OSPAR Convention requires Contracting Parties to take all possible steps to prevent and eliminate pollution and to take the necessary measures to protect the maritime area against the adverse effects of human activities so as to safeguard human health and to conserve marine ecosystems and, when practicable, restore marine areas which have been adversely affected. To this end Contracting Parties shall, individually and jointly, adopt programmes and measures and shall harmonise their policies and strategies. The Convention safeguards the application of the precautionary principle, the polluter pays principle, time limits for the completion of programmes and measures and to take full account the application of the latest technical developments such as best available techniques, best environmental practice including, where appropriate, clean technology.

3. The OSPAR Commission has adopted and regularly updated, also in the context of the MSFD, the North-East Atlantic Environment Strategy which addresses the implementation of the ecosystem approach to the management of human activities which is then translated into five thematic strategies: 1) biological diversity and ecosystems, 2) eutrophication, 3) hazardous substances, 4) offshore oil and gas industry, and 5) radioactive substances. Objectives, guiding principles and main strategic directions have been set and, in line with the Convention, a timeframe has been laid down for implementation of the OSPAR Strategy, *inter alia* by programmes and measures identified.²

4. This document aims to provide a regional overview of the measures already agreed within OSPAR that support the achievement of good environmental status in marine waters under the MSFD. These measures usually relate to environmental targets that Contracting Parties may have established under Article 10 of the MSFD. The OSPAR maritime area (Figure 1) largely encompasses the MSFD ‘North-East Atlantic Ocean’ Region. OSPAR measures address the control of human activities and related pressures and impacts in order to prevent or minimise effects, directly or indirectly, to the marine environment. As an example, measures with regard to preventing and minimising pollution are of a generic nature aiming at protecting the OSPAR maritime as a whole, measures concerning the protection of species and habitats are usually more region specific depending on their occurrence due to physiographic, geographic and climatic conditions.³

¹ OSPAR, 2012. Finding Common Ground – Towards regional coherence in implementing the Marine Strategy Framework Directive. An overview of Decisions, Recommendations and other agreements applicable within the framework of the OSPAR Convention is at: <http://www.ospar.org/content/content.asp?menu=00040400000000 000000 000000>

² 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 (Agreement 2010-3)

³ Article 24 of the Convention: ‘The Commission may decide that any decision or recommendation adopted by it shall apply to all, or a specified part, of the maritime area and may provide for different timetables to be applied, having regard to the differences between ecological and economic conditions in the various regions and sub-regions covered by the Convention.’

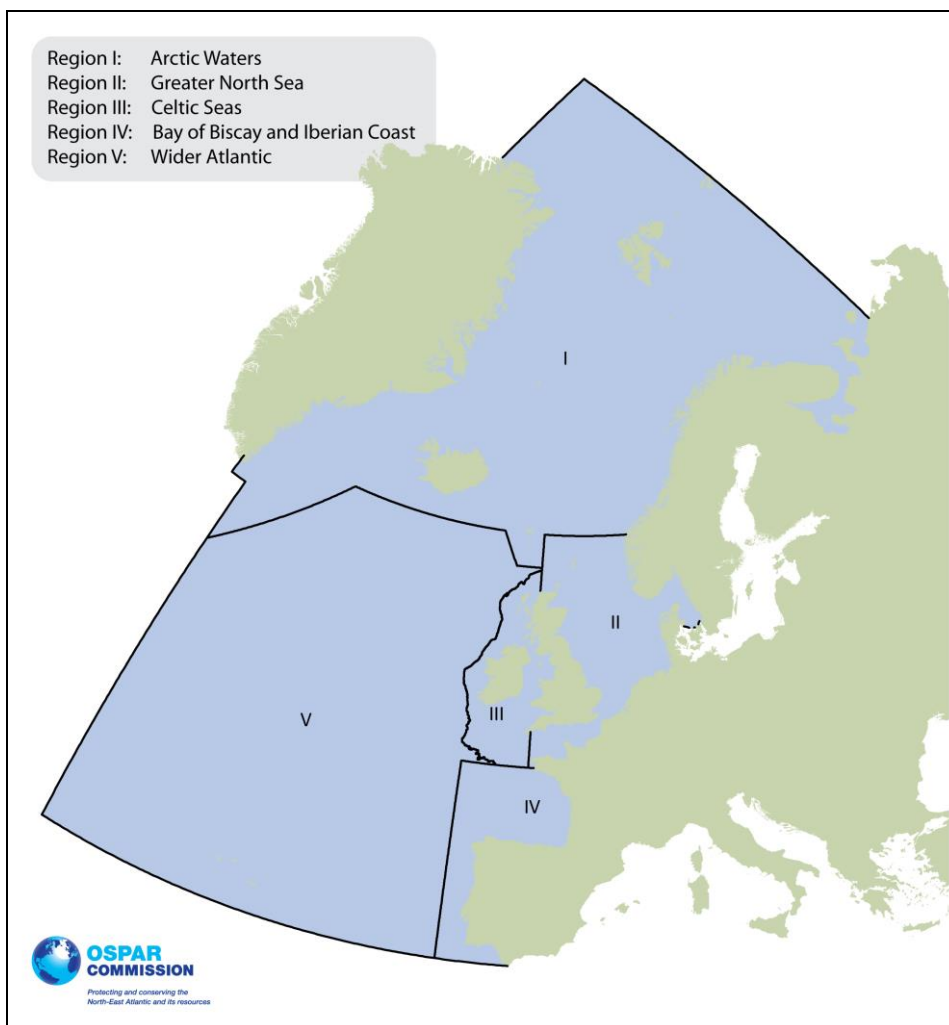


Figure 1: OSPAR Regions I–V.

5. OSPAR measures can take the form of (legally binding) Decisions or Recommendations. In accordance with Article 13 the Convention these measures are usually adopted unanimously which guarantees broad acceptance of those measures and their implementation. Should unanimity not be attainable, the OSPAR Commission may nonetheless adopt decisions or recommendations by a three-quarters majority vote of the Contracting Parties. These are usually only rare occasions. The OSPAR Commission also adopts ‘other agreements’ e.g. for setting guidance for the implementation of decisions and recommendations, or establishing programmes for further work on (a set of) OSPAR measures, and any actions recommended to other international organisations.⁴

Text box 1: The Marine Strategy Framework Directive⁵

The MSFD (2008) outlines a transparent, legislative framework for an ecosystem-based approach to the management of human activities which supports the sustainable use of marine goods and services. The overarching goal of the Directive is to achieve ‘Good Environmental Status’ (GES) by 2020 across Europe’s marine environment.

In order to achieve GES in a coherent and strategic manner, the MSFD establishes four European Marine Regions, based on geographical and environmental criteria. The North East Atlantic Marine Region is

⁴ 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.

⁵ Diagram as based on STAGES

divided into four subregions. Each Member State is required to develop a marine strategy for their waters, in coordination with other countries within the same marine region or subregion. This coordination is to be achieved through the Regional Seas Conventions, of which the OSPAR Convention is one.

Member States needed to determine by 2012 what GES means for their waters in a (sub-)regional context on the basis of eleven high-level descriptors (see simplified schematic). Member States are formulating their monitoring programmes (2014), followed by programmes of measures to achieve GES (2015).



2. How the requirements of the Directive are being addressed in the North-East Atlantic Region

6. Article 13(1), MSFD, requires that Member States, in respect of each marine region or subregion concerned, shall identify the measures which need to be taken in order to achieve or maintain good environmental status, as determined pursuant to Article 9(1), in their marine waters. Those measures shall be devised on the basis of the initial assessment made pursuant to Article 8(1) and by reference to the environmental targets established pursuant to Article 10(1), and taking into consideration the types of measures listed in Annex VI.

7. Article 13(2), MSFD, requires that Member States shall integrate the measures devised pursuant to paragraph 1 into a programme of measures, taking into account relevant measures required under Community legislation, in particular Directive 2000/60/EC, Council Directive 91/271/EEC of 21 May 1991 concerning urban waste water treatment and Directive 2006/7/EC of the European parliament and of the Council of 15 February 2006 concerning the management of bathing water quality, as well as forthcoming legislation on environmental quality standards in the field of water policy, or international agreements.

8. EU Common Implementation Strategy guidance distinguishes two categories of existing measures under Articles 13.1 And 13.2:⁶

- 1.a) measures relevant for the maintenance and achievement of GES under the MSFD that have been adopted under other policies and implemented;
- 1.b) measures relevant for the maintenance and achievement of GES under the MSFD that have been adopted under other policies but that have not yet been implemented or fully implemented.

9. In this guidance it is stated that for both categories of existing measures, adopted or planned under other policies, no specific need for cost-effectiveness analysis or cost-benefit analysis is defined under the MSFD. Article 13.3 says that Member States shall ensure that measures are cost-effective and technically

⁶ Programmes of measures under MSFD – Recommendations for establishment / implementation and related reporting (EU Common Implementation Strategy); see Appendix 1.

feasible, and shall carry out impact assessments, including cost-benefit analysis, prior to the introduction of any new measure. Existing OSPAR measures were established under the policy of an international agreement, connected with other EU legislation than the MSFD and have usually already been subject to impact assessments.

10. As stated earlier the justification of OSPAR measures is usually based on the OSPAR Convention, the North-East Atlantic Strategy and, additionally, on prior agreements on OSPAR programmes e.g. in the form of action plans. The OSPAR Commission works on the basis of lead countries taking work forward. This means that further justification, if necessary, and draft measures are proposed by one or more lead countries and discussed in the relevant working groups and / or committees, and are then finally agreed by the OSPAR Commission at its annual meeting. It is well-established practice that lead countries first produce a background document on a certain problem that needs resolution in the form of a measure. Once agreed and published, the lead country then comes up with a proposal for a draft recommendation or decision.

11. When lead countries are drawing up these OSPAR products their legal and linguistic quality is safeguarded by the application of the 'Guidelines for the preparation of draft OSPAR Background Documents and draft OSPAR Measures, including guidance for the collection and assessment of data and information for the preparation of draft OSPAR Background Documents and other reports' (ref. nr. 2004-01). There is an additional check before the annual OSPAR Commission meeting on draft proposed measures by OSPAR's Group of Jurists / Linguists.

12. When drawing up draft OSPAR decisions or recommendations, lead countries are also designing implementation reporting formats attached to such a measure. The Convention (Article 22) requires that the Contracting Parties shall report to the OSPAR Commission at regular intervals on:

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

13. Consequently (Article 23) the OSPAR Commission shall:

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

14. On the OSPAR website all decisions and recommendations are listed and available for downloading, including the overviews of implementation reporting where they exist.⁷ Implementation reporting on individual, or where appropriate, a set of measures is usually carried out every 4 - 6 years in accordance with OSPAR's Standard Implementation Reporting and Assessment Procedure (agreement 2003-23, updated in 2005). In the following overviews there is an indication of the state of play of implementation of OSPAR measures. Where appropriate, there is an indication whether the measures concerned are also covered by EU legislation.

⁷ Decisions: http://www.ospar.org/v_measures/browse.asp?menu=00510416000000_000000_000000

Recommendations: http://www.ospar.org/v_measures/browse.asp?menu=00520417000000_000000_000000

3. Existing OSPAR measures as an *acquis* for MSFD implementation

15. Whereas Member States shall assess their progress towards achieving or maintaining GES and / or meeting their environmental targets against (sets of) the MSFD descriptors⁸, the following sections have been set up in accordance with the division:

- 3.1 biodiversity (D1, D2, D4, D6);
- 3.2 hydrographic conditions (D7);
- 3.3 eutrophication (D5);
- 3.4 contaminants (D8, D9);
- 3.5 marine litter (D10);
- 3.6 underwater noise (D11).

16. The types of measures are described, and there is an indication of current and future activity in OSPAR with regard to any new measures. This is preceded by a short overview of previous activities in OSPAR on the subject matter. For existing measures there is a description with corresponding EU legislation and the state of implementation of the existing OSPAR measures is identified in accordance with the EU MSFD CIS guidance. In the overview tables for category 1.a the year mentioned denotes the most recent year that an OSPAR overview assessment has been published and a decision was made that implementation reporting could cease as the measure(s) had been fully implemented. For category 1.b the years mentioned denote the most recent publication of an OSPAR overview assessment, if any, and the upcoming year(s) of implementation reporting.

3.1 Biodiversity (D1, D2, D4 and D6)

3.1.1 *Species and habitats (D1, D4 and D6)*

17. The protection of species and habitats at risk in the North-East Atlantic is one of the core commitments in the Convention (Annex V and Appendix 3) and in the (thematic) Strategy on Biological Diversity and Ecosystems. To help establish priorities in OSPAR's work, countries agreed a List in 2003 (extended in 2008) to include 42 species and 16 habitats that were assessed to be either threatened or in decline.⁹ Once identified as being at risk, it was a priority to agree actions and measures that could be put in place to alleviate the threats and improve the status of these ecological features. They represent the range of biodiversity including birds, fish, mammals and invertebrates, shallow and deep sea habitats to be found from all over the OSPAR maritime area. Some are well known to us as being very special and very rare, like the blue whale or the White Cliffs of Dover (otherwise known as a littoral chalk community). Others like cod, have successful populations in some OSPAR regions, but not in others. Some of the deep sea species and habitats are much more elusive.

18. There is an overlap between the areas protected by the EU Birds and Habitats Directive (BHD) and by the OSPAR Convention as shown in the map. The EU Directives, including the MSFD, cover the European territory of Member States to which the EU Treaty applies. The OSPAR maritime area extends beyond those areas and additionally covers areas beyond national jurisdiction. The area where the OSPAR Recommendations apply therefore covers a wider area than the MSFD marine waters and the BHD areas; from an ecosystem approach point of view this is beneficial for the protection of the biodiversity in Member States' marine waters.

⁸ The MSFD descriptors are presented in Appendix 2.

⁹ OSPAR List of Threatened and/or Declining Species and Habitats (agreement 2008-6). The species and habitats have been selected on the basis of the relevant Texel/Faial criteria for the identification of species in need of protection (agreement 2003-13). The information used has been compiled into a justification report, which has been published in case reports for the OSPAR List of Threatened and/or Declining Species and Habitats (OSPAR publication 2008/358).

19. In 2010 the OSPAR Commission adopted 6 Recommendations concerning the protection of species and habitats and an additional - more generic - Recommendation 2010/5 on assessments of environmental impact in relation to threatened and/or declining species and habitats in order to safeguard that the relevant OSPAR species and habitats should be taken into account in national environmental impact reports. The OSPAR Commission adopted a further 7 recommendations in 2011, 3 in 2012, 12 in 2013 (accompanied by a 'Statement on the common understanding of the Recommendations on species and habitats')¹⁰, 16 in 2014, and another 4 in 2015. This makes so far a total of 48 species and habitats covered by Recommendations (of 58) which represents 83 % of the total number on the OSPAR List. An overview of those measures is presented in table 1. For all species and habitats now covered the OSPAR Commission has adopted and published background documents.¹¹

20. In general the agreed measures contain actions to be considered on a national basis¹² e.g.:

- promoting conservation measures, including those arising from international action plans e.g. for seabirds, and where appropriate promoting to include species or habitats under international conventions (NC),
- their implementation in national legislation and, e.g. for seabirds, in national action plans (NL),
- assessing whether existing management measures for protection are effective and determine what further measures are needed to address key threats, including the implementation of existing OSPAR measures concerning e.g. pollution from chemicals, oil, nutrients or marine litter, or conservation measures where populations are either depleted or locally extinct, with a special focus on estuarine habitats, spawning habitats and river migration routes (NP),
- setting up sufficient capacity for monitoring and assessment (NM),
- promoting funding for research where knowledge gaps exist (NF),
- (improving) raising awareness of the status of species and habitats across those who live and work around and on the seas (NR),
- increasing knowledge and improving the way this information is fed back into decision making – whether this is within OSPAR or whether it is to be brought to the attention of other organisations that have responsibilities for management in the oceans (NK),
- paying particular attention of the species and habitats in the designation of marine protected areas and report to OSPAR (NA).

21. The agreed measures also contain actions that Contracting Parties should take collectively.¹² They encompass, inter alia:

- setting up OSPAR monitoring strategies and assessment frameworks, including improvement of OSPAR habitat mapping (OM),
- developing and implementing an OSPAR action plan, e.g. for birds, or establishing guidance on how to minimise disturbing and/or harmful physical effects to mammals, or assessing effectiveness of MPAs concerning certain habitats and/or species (OA),
- promoting cooperation with e.g. ICES to improve the knowledge base on temporal occurrence, abundance and geographical distribution in the maritime area (and address research needs) (OK),
- cooperating with the relevant international competent authorities to promote management measures, e.g. with respect to fisheries¹³ (OI),

¹⁰ Agreement 2013-13.

¹¹ http://www.ospar.org/v_publications/browse.asp?menu=00080800000000 000000 000000

(series: biodiversity and ecosystems).

¹² Abbreviations of the actions mentioned are presented in table 1 for each measure (column "actions"). For mammals actions are identified as collective actions of Contracting Parties that also need to be pursued individually. In table 1 these are identified with one or more "N" followed by "(coll.)".

¹³ In line with Article 4.1 of Annex V of the OSPAR Convention, 1992.

- promoting inclusion of species and habitats as subsets of Vulnerable Marine Ecosystems (VME), subject to conservation measures as given in United Nations General Assembly resolutions 61/105 and 64/72 on Sustainable fisheries, and UN Food and Agriculture Organisation International Guidelines for the management of deep sea fisheries in the high seas (OU).

22. As regards the state of implementation, the deadline for the first reporting by Contracting Parties on the 16 Recommendations agreed in the period 2010-2012 was 31 December 2013. Further implementation reports are required every 6 years thereafter. The deadlines for the first and second implementation reporting by Contracting Parties on the further 32 Recommendations agreed in 2013, 2014 and 2015 are 31 December 2016 and 31 December 2019. Further reports are required every 6 years after 2019.¹⁴ At this stage, only for 16 Recommendations, there is limited insight in the status of compliance with the measures. There is no information as yet concerning the effectiveness of the measures. The Biodiversity Committee decided to produce an overview assessment of implementation reports in 2017.

23. In order to further the work the OSPAR Commission in 2014 adopted terms of reference for an intersessional correspondence group for the implementation and follow up of measures for the protection and conservation of species and habitats (ICG-POSH). There is a critical need for a strategic approach to delivering against this series of measures. The implementation of these measures is considered integral to the delivery of theme Biodiversity and Ecosystems of the North-East Atlantic Environment Strategy and requires close cooperation of the Biodiversity Committee with other committees, especially the Environmental Impact of Human Activities Committee, in order to deliver the agreed targets and actions. Therefore convenors will be nominated to represent the biodiversity and environmental impacts of human activities perspectives.

¹⁴ These sequences are simply highlighted in table 1 (column “implementation” with 2013, 2019 and 2016, 2019).

Table 1 Measures concerning species and habitats

R = OSPAR Recommendation, D = OSPAR Decision. Cat. (1.a) = measure adopted and implemented (reporting ceased), Cat. (1.b) = measure adopted and not yet (fully) implemented (reporting ongoing). Type of actions in measure explained at the bottom of this table.

Part I : Species

COMMON NAME	OSPAR measure	OSPAR Regions ¹⁵ where the species occurs	OSPAR Regions ³ where the species is under threat and/or in decline	Type of actions in the measure	Implementation reports (every 6 years after 2019) (cat.)
INVERTEBRATES					
Ocean quahog	R2013/05	I, II, III, IV	II	NL, NM, NA, NK, OM, OI	2016, 2019 (1.b)
Azorean barnacle	-	V	All where it occurs	-	-
Dog whelk	-	All	II, III, IV	-	-
Flat oyster	R2013/04	I, II, III, IV	II	NC, NL, NP, NM, NA, NK, OM, OK, OI	2016, 2019 (1.b)
Azorean limpet	R2015/02	V	All where it occurs	NL, NP, NF, NA, NM, NR, NC, NK, OM, OK, OI	2016, 2019 (1.b)
BIRDS					
Lesser black-backed gull	R2011/01	I	All where it occurs	NC, NL, NA, NM, NR, NK, OM, OA, OK, OI	2013, 2019 (1.b)
Ivory gull	R2011/02	I	All where it occurs	NC, NL, NA, NM, NR, NK, OM, OK	2013, 2019 (1.b)
Steller's eider	R2013/12	I	All where it occurs	NM, NP, NA, OM, OI, OK	2016, 2019 (1.b)
Little shearwater	R2011/03	V	All where it occurs	NC, NL, NA, NM, NR, OM, OK, OI	2013, 2019 (1.b)
Balearic shearwater	R2011/04	II, III, IV, V	All where it occurs	NC, NL, NA, NM, NR, OM, OK, OI	2013, 2019 (1.b)
Black-legged kittiwake	R2011/05	I, II, III, IV, V	I, II	NC, NL, NA, NM, NR, OM, OK, OI	2013, 2019 (1.b)
Roseate tern	R2011/06	II, III, IV, V	All where it occurs	NC, NL, NA, NM, NR, OM, OK, OI	
Iberian guillemot	R2014/16	IV	All where it occurs	NC, NL, NP, NK, NR, NA, NM, OM, OI, OK	2016, 2019 (1.b)
Thick-billed murre	R2011/07	I	All where it occurs	NC, NL, NA, NK, NM, NR, OM, OK, OI	2013, 2019 (1.b)
FISH					
Sturgeon	R2014/01	II, IV	All where it occurs	NL, NP, NR, NA, OK, OA, OI	2016, 2019 (1.b)
Allis shad	R2015/04	II, III, IV	All where it occurs	NL, NP, NA, NM, NK, OK, OU, OI	2016, 2019 (1.b)
European eel	R2014/15	I, II, III, IV	All where it occurs	NC, NL, NP, NK, NA, NM, OM, OI, OK	2016, 2019 (1.b)
Portuguese dogfish	R2014/05	All	All where it occurs	NC, NL, NP, NF, NK, NR, NA, OM, OA, OK, OI	2016, 2019 (1.b)

¹⁵ The OSPAR Regions are:

I - the Arctic: the OSPAR maritime area north of latitude 62°N, but also including Iceland and the Færoes;

II - the Greater North Sea: the North Sea, the English Channel, the Skagerrak and the Kattegat to the limits of the OSPAR maritime area, bounded on the north by latitude 62°N, on the west by longitude 5°W and the east coast of Great Britain, and on the south by latitude 48°N;

III - the Celtic Seas: the area bounded by, on the east, longitude 5°W and the west coast of Great Britain and on the west by the 200 metre isobath (depth contour) to the west of 6°W along the west coasts of Scotland and Ireland;

IV - the Bay of Biscay/Golfe de Gascogne and Iberian coasts: the area south of latitude 48°N, east of 11°W and north of latitude 36°N (the southern boundary of the OSPAR maritime area);

V - the Wider Atlantic: the remainder of the OSPAR maritime area.

COMMON NAME	OSPAR measure	OSPAR Regions ¹⁵ where the species occurs	OSPAR Regions ³ where the species is under threat and/or in decline	Type of actions in the measure	Implementation reports (every 6 years after 2019) (cat.)
Gulper shark	R2014/03	IV, V	All where it occurs	NC, NL, NP, NF, NK, NR, NA, OM, OA, OK, OI	2016, 2019 (1.b)
Leafscale gulper shark	R2014/04	All	All where it occurs	NC, NL, NP, NF, NK, NR, NA, OM, OA, OK, OI	2016, 2019 (1.b)
Basking shark	R2010/06	All	All where it occurs	NC, NL, NR, NA, NM, OK, OI	2013, 2019 (1.b)
Houting	-	II	All where it occurs	-	-
Common Skate	R2010/06	All	All where it occurs	NC, NL, NR, NA, OK, OI	2013, 2019 (1.b)
Spotted Ray	R2014/07	II, III, IV, V	All where it occurs	NC, NL, NP, NK, NR, NA, OM, OI, OA	2016, 2019 (1.b)
Cod	R2014/14	All	II, III	NC, NL, NP, NK, NA, OM, OI	2016, 2019 (1.b)
Long-snouted seahorse	R2012/03	II, III, IV, V	All where it occurs	NC, NL, NP, NA, NK, NR, OM, OK, OI	2013, 2019 (1.b)
Short-snouted seahorse	R2012/02	II, III, IV, V	All where it occurs	NC, NL, NP, NA, NK, NR, OM, OK, OI	2013, 2019 (1.b)
Orange roughy	R2010/07	I, V	All where it occurs	NL, NF, NK, NR, OM, OK, OI	2013, 2019 (1.b)
Porbeagle shark	R2014/06	All	All where it occurs	NC, NL, NP, NF, NK, NR, NA, OM, OA, OK, OI	2016, 2019 (1.b)
Sea lamprey	R2015/03	I, II, III, IV	All where it occurs	NL, NP, NA, NR, NM, NK, OK, OU, OI	2016, 2019 (1.b)
Thornback skate / ray	R2014/08	I, II, III, IV, V	II	NC, NL, NP, NK, NR, NA, OM, OI, OA	2016, 2019 (1.b)
White skate	R2010/06	II, III, IV	All where it occurs	NC, NL, NR, NA, OK, OI	2013, 2019 (1.b)
Salmon	-	I, II, III, IV	All where it occurs ¹⁶	-	-
[Northeast Atlantic] spurdog	R2014/02	All	All where it occurs	NC, NL, NP, NF, NK, NR, NA, OM, OA, OK, OI	2016, 2019 (1.b)
Angel shark	R2010/06	II, III, IV	All where it occurs	NC, NL, NR, NA, OK, OI	2013, 2019 (1.b)
Bluefin tuna	-	V	All where it occurs ¹⁷	-	-
REPTILES					
Loggerhead turtle	R2013/07	IV, V	All where it occurs	NL, NP, NM, NA, NR, NK, OM, OK, OI	2016, 2019 (1.b)
Leatherback turtle	R2013/06	All	All where it occurs	NL, NP, NM, NA, NR, NK, OM, OK, OI	2016, 2019 (1.b)
MAMMALS					
Bowhead whale	R2013/08	I	All where it occurs	NM, NP, NA, NR (coll.), NK, OI	2016, 2019 (1.b)
Blue whale	R2013/09	All	All where it occurs	NM, NP, NA, NR (coll.), NK, OI	2016, 2019 (1.b)
Northern right whale	R2013/10	All	All where it occurs	NM, NP, NA, NR (coll.), OI	2016, 2019 (1.b)
Harbour porpoise	R2013/11	All	II, III	NC, NL, NP, NA, NM, NK, OM, OA, OI	2016, 2019 (1.b)

¹⁶ In accordance with the comments of ICES in its review, the varying states of the numerous different stocks have to be taken into account.

¹⁷ The main threat is the high rate of catch of juvenile fish of the species (SCRS Report, page 59).

Part II - Habitats

DESCRIPTION	OSPAR Measure	OSPAR Regions where the habitat occurs	OSPAR Regions where such habitats are under threat and/or in decline	Type of actions in the measure	Implementation reports (every 6 years after 2019) (cat.)
HABITATS					
Carbonate mounds	R2014/10	I, V	V ¹⁸	NC, NL, NP, NM, NK, NR, NA, OM, OI, OK	2016, 2019 (1.b)
Coral Gardens	R2010/09	I, II, III, IV, V	All where they occur	NL, NP, NM, NR, NA, NK, OM, OK, OI, OU	2013, 2019 (1.b)
<i>Cymodocea</i> meadows	R2014/12	IV	All where they occur	NC, NL, NP, NM, NK, NR, NA, OM, OI, OK	2016, 2019 (1.b)
Deep-sea sponge aggregations	R2010/10	I, III, IV, V	All where they occur	NL, NP, NM, NR, NA, NK, OM, OK, OI, OU	2013, 2019 (1.b)
Intertidal <i>Mytilus edulis</i> beds on mixed and sandy sediments	R2015/01	II, III	All where they occur	NL, NM, NK, NP, NA, NR, NK, OM, OK, OI	2016, 2019 (1.b)
Intertidal mudflats	-	I, II, III, IV	All where they occur	-	-
Littoral chalk communities	R2013/01	II	All where they occur	NC, NL, NP, NM, NR, NA, NK, OM, OK, OI	2016, 2019 (1.b)
<i>Lophelia pertusa</i> reefs	R2010/08	All	All where they occur	NL, NP, NM, NR, NA, NK, OM, OK, OI, OU	2013, 2019 (1.b)
Maerl beds	R2014/13	All	III	NC, NL, NP, NM, NK, NR, NA, OM, OI, OK	2016, 2019 (1.b)
<i>Modiolus modiolus</i> beds	R2013/03	All	All where they occur	NC, NL, NP, NM, NR, NA, NK, OM, OK, OI	2016, 2019 (1.b)
Oceanic ridges with hydrothermal vents/fields	R2014/11	I, V	V	NC, NL, NP, NM, NK, NR, NA, OM, OI, OK	2016, 2019 (1.b)
<i>Ostrea edulis</i> beds	R2013/04	II, III, IV	All where they occur	NC, NL, NP, NM, NA, NK, OM, OK, OI	2016, 2019 (1.b)
<i>Sabellaria spinulosa</i> reefs	R2013/02	All	II, III	NC, NL, NP, NM, NR, NA, NK, OM, OK, OI	2016, 2019 (1.b)
Seamounts	R2014/09	I, IV, V	All where they occur	NC, NL, NP, NM, NK, NR, NA, OM, OI, OK	2016, 2019 (1.b)
Sea-pen and burrowing megafauna communities	R2010/11	I, II, III, IV	II, III	NL, NP, NM, NR, NA, NK, OM, OK, OI	2013, 2019 (1.b)
<i>Zostera</i> beds	R2012/04	I, II, III, IV	All where they occur	NC, NL, NP, NM, NR, NA, OM, OI	2013, 2019 (1.b)

Note: Type of actions in the measure:

Actions to be considered on a national basis:

NC = Promote conservation measures, including those arising from international action plans e.g. for seabirds, and where appropriate promoting to include species or habitats under international conventions.

NL = Implement measures in national legislation and, e.g. for seabirds, in national action plans.

NP = Assess whether existing management measures for protection are effective and determine what further measures are needed to address key threats, including the implementation of existing OSPAR measures concerning e.g. pollution from chemicals, oil, nutrients or marine litter, or conservation measures where populations are either depleted or locally extinct, with a special focus on estuarine habitats, spawning habitats and river migration routes.

NM = Set up sufficient capacity for monitoring and assessment (NM).

NF = Promote funding for research where knowledge gaps exist.

NR = (Improve) raising awareness of the status of species and habitats across those who live and work around and on the seas (NR).

NK = Increase knowledge and improve the way this information is fed back into decision making – whether this is within OSPAR or whether it is to be brought to the attention of other organisations that have responsibilities for management in the oceans.

NA = Pay particular attention of the species and habitats in the designation of marine protected areas and report to OSPAR (NA).

Actions that Contracting Parties should take collectively:

OM = Set up OSPAR monitoring strategies and assessment frameworks, including improvement of OSPAR habitat mapping.

OA = Develop and implement an OSPAR action plan, e.g. for birds, or establishing guidance on how to minimise disturbing and/or harmful physical effects to mammals, or assessing effectiveness of MPAs concerning certain habitats and/or species.

¹⁸ To be confirmed in the light of further survey work being undertaken by Ireland.

OK = Promote cooperation with e.g. ICES to improve the knowledge base on temporal occurrence, abundance and geographical distribution in the maritime area (and address research needs).

OI = Cooperate with the relevant international competent authorities to promote management measures, e.g. with respect to fisheries

OU = Promote inclusion of species and habitats as subsets of Vulnerable Marine Ecosystems (VME), subject to conservation measures as given in United Nations General Assembly resolutions 61/105 and 64/72 on Sustainable fisheries, and UN Food and Agriculture Organisation International Guidelines for the management of deep sea fisheries in the high seas.

3.1.2 Non-indigenous species (D2)

24. In order to achieve the objective of the Biological Diversity and Ecosystems Strategy, the OSPAR Commission will endeavour to limit the introduction of non-indigenous species by human activities that do not adversely alter the ecosystems. It is therefore important to control the predominant pressures on the marine environment, in particular the distribution and inputs of invasive alien species through the discharge of ballast water of sea-going vessels. In 2004 the International Convention for the Control and Management of Ships' Ballast Water and Sediments was adopted (IMO). However this Convention has not yet entered into force. The Convention aims to prevent the spread of harmful aquatic organisms from one region to another, by establishing standards and procedures for the management and control of ships' ballast water and sediments. Under the Convention, all ships in international traffic are required to manage their ballast water and sediments to a certain standard, according to a ship-specific ballast water management plan. All ships will also have to carry a ballast water record book and an international ballast water management certificate. The ballast water management standards will be phased in over a period of time. As an intermediate solution, ships should exchange ballast water mid-ocean. However it is expected most ships will need to install an on-board ballast water treatment system.

25. The Annex to the Convention provides for Parties, under Regulation A-4, the scope to issue exemptions from Regulation B-3 (Ballast Water Management for Ships) and Regulation C-1 (Additional Measures). Therefore, the Helsinki and OSPAR Commissions have jointly developed such guidelines, prior to the Convention coming into force, to ensure that exemptions are granted in a constant manner that prevents damage to the environment, human health, property or resources.¹⁹ The guidelines consist of the following chapters: (1) port survey protocol, (2) target species identification, (3) data storage, (4) risk assessment, (5) decision support tool and (7) administrative procedures. A Joint OSPAR-HELCOM Task Group on Ballast Water Exemptions is carrying out work to implement the joint harmonised procedure.

26. There is also general guidance on the voluntary interim application of the D1 Ballast Water Exchange Standards (1) in the North-East Atlantic and the Baltic Sea (agreement: 2008-10), (2) by vessels leaving the Baltic Sea and transiting through the North-East Atlantic to other destinations (agreement: 2009-05), (3) by vessels operating between the Mediterranean Sea and the North-East Atlantic and/or the Baltic (agreement: 2010-17). OSPAR also established a Joint Notice to Shipping from the Contracting Parties of the Barcelona Convention, OSPAR and HELCOM on such guidance (agreement: 2012-17).

3.1.3 Marine protected areas (MPAs)

27. Based on the North-East Atlantic Strategy, OSPAR Recommendation 2003/3²⁰ on a Network of Marine Protected Areas²¹ sets out the goal for Contracting Parties to continue the establishment of the OSPAR Network and to ensure that:

- a. by 2012 it 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 regions;²²

¹⁹ Joint Harmonised Procedure for the Contracting Parties of HELCOM and OSPAR on the granting of exemptions under the International Convention for the Control and Management of Ships' Ballast Water and Sediments, Regulation A-4 (agreement 2015-01).

²⁰ Amended by OSPAR Recommendation 2010/2.

²¹ Guidelines for the Identification and Selection of Marine Protected Areas in the OSPAR Maritime Area, revised in 2007 (agreement 2003-17).

²² Guidance on developing an ecologically coherent network of OSPAR Marine Protected Areas (agreement 2006-03).

- b. by 2016 it 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 2010).²³

28. Since 2005, all 12 Contracting Parties bordering the North-East Atlantic have nominated sites to the OSPAR Network of MPAs both in their national waters as well as collectively in areas beyond national jurisdiction (ABNJ)/in the High Seas. The contributions by CPs differ substantially regarding distribution of sites across coastal and offshore waters as well regarding overall coverage of their national waters by OSPAR MPAs.

29. The OSPAR Commission publishes a status report on the OSPAR Marine Protected Areas on a biennial basis. The most recent report indicated that by 1 October 2014 the OSPAR Network of MPAs comprises 413 MPAs,²⁴ including 403 MPAs situated within national waters of Contracting Parties and 10 MPAs situated in areas beyond the limits of national Exclusive Economic Zones (EEZs) with different jurisdictional regimes. Collectively, these sites have a total surface area of 788 377 km² covering 5.82% of the OSPAR Maritime Area (OSPAR measures concerning MPAs in Areas Beyond National Jurisdiction are presented in Table. 2).

30. The distribution of MPAs across coastal and offshore waters as well as across the five OSPAR Regions is imbalanced, resulting in major gaps of the network. The vast majority of sites have been designated in territorial waters (23.59% covered by OSPAR MPAs) and far less in the EEZs (3.06% covered by OSPAR MPAs). Currently, 6.02% of the area beyond the limits of national EEZs, i.e. the High Seas, the Area and the ECS areas, are covered by OSPAR MPAs.

31. The Greater North Sea has, compared to the other four OSPAR Regions, reached the target set by the CBD to protect by 2020 at least 10% of coastal and marine areas. The Wider Atlantic and the Celtic Seas, however, are well represented with 8.27% and 6.65% coverage by OSPAR MPAs respectively. While coverage of the Bay of Biscay and Iberian Coast is at 4.81%, the Arctic Waters show the lowest coverage with only 1.94% of the area being protected by OSPAR MPAs.

32. In 2014, 77 MPAs covering more than 89,397 km² were added to the OSPAR Network of MPAs. Contributions were made by the United Kingdom (61 MPAs covering 71,153 km²), Spain (11 MPAs covering 17,843 km²) and Iceland (5 MPAs covering 401 km²). The overall area being protected by OSPAR MPAs has thus increased by 0.65% (from 5.17% to 5.82%).

33. The ecological coherence of the OSPAR Network of MPAs has been assessed at the end of 2012.²⁵ The assessment concluded that whilst the OSPAR Network of MPAs as a whole is not ecologically coherent there are positive signs. The network has a good representation of the different biogeographic regions within the North-East Atlantic, which is one of the requirements for ecological coherence. The report highlighted a paucity of data and understanding around some of the principles underpinning ecological coherence as barriers to undertaking more sophisticated assessments in the future. The work on assessing the ecological coherence of the OSPAR Network of MPAs is ongoing.

34. Comprehensive conclusions on the ecological coherence of the OSPAR Network of MPAs are still not possible due to the unavailability of sufficient relevant ecological data on the distribution of species and habitats in the OSPAR maritime area. Considering the spatial arrangement of its components, as summarised above, the OSPAR Network of MPAs cannot be judged to be ecologically coherent yet. However, certain regions of the OSPAR MPA Network, i.e. the Greater North Sea, the Celtic Seas, around the Azores and the ABNJ/High Seas of the Wider Atlantic, show first signs of ecological coherence. The

²³ Guidelines for the Management of Marine Protected Areas in the OSPAR Maritime Area, revised in 2006 (agreement 2003-18).

²⁴ OSPAR publication 649/2015: 2015 Status Report on the OSPAR Network of Marine Protected Areas. See also OSPAR's MPA database on <http://mpa.ospar.org>.

²⁵ An assessment of the ecological coherence of the OSPAR Network of Marine Protected Areas was carried out in 2012 (OSPAR Publication 619/2013). The OSPAR Commission in 2014 noted the ongoing work to assess ecological coherence and management effectiveness of the OSPAR network of MPAs. In regard to this work, Contracting Parties were urged to continue engaging with the EU process to develop approaches for assessing MSFD Article 13.4 (in the Marine Expert Group under the EU Coordination Group Biodiversity and Nature) to ensure consistency with the work undertaken within OSPAR and avoid any divergent approaches or duplication of effort in this area of work.

development of a methodology to assess the management effectiveness of the OSPAR Network of MPAs is ongoing.

35. As no sufficiently detailed information on the management of sites has been made available by Contracting Parties, it remains similarly impossible at this time to comprehensively conclude on the extent to which OSPAR MPAs are well-managed. While in general a number of sites are subject to management regimes, including conservation objectives, management plans and specific regulatory measures, no evidence on their effectiveness in achieving the goals for which these were established has been provided. Management plans and measures for many sites are still being prepared.

Table 2 Measures concerning MPAs in Areas Beyond National Jurisdiction in OSPAR Region V

Note: SB = biodiversity and ecosystems of parts of the continental shelf. SW = biodiversity and ecosystems of water superjacent to the continental shelf. E = establishment of MPA. MM = requirement for management measures. AR = awareness raising with authorities and users of the sea. IB = information building with stakeholder. MS = promote, encourage and support marine science projects. ND = keep a watching brief on new developments and take action, as appropriate. TP = engage with third parties and relevant international organisations and encourage application of programmes and measures. There is no indication (yet) of implementation status as these measures are still subject to further elaboration of actions under the collective arrangement between competent international organisations on cooperation and coordination regarding selected areas beyond national jurisdiction in the North-East Atlantic (agreement: 2014-09).

NAME	OSPAR Measure	Protection	Type of measure	Type of actions	Implementation reporting (per 31 December)
Milne Seamount Complex	D2010/1	SB, SW	E	-	-
	R2010/12	SB, SW	MM	AR, IB, MS, ND, TP	2011, thereafter annually if applicable
Altair Seamount High Seas	D2010/3	SW	E	-	-
	R2010/14	SW	MM	AR, IB, MS, ND, TP	2011, thereafter annually if applicable
Antialtair Seamount High Seas	D2010/4	SW	E	-	-
	R2010/15	SW	MM	AR, IB, MS, ND, TP	2011, thereafter annually if applicable
Josephine Seamount High Seas	D2010/5	SW	E	-	-
	R2010/16	SW	MM	AR, IB, MS, ND, TP	2011, thereafter annually if applicable
Mid Atlantic Ridge North of the Azores	D2010/6	SW	E	-	-
	R2010/17	SW	MM	AR, IB, MS, ND, TP	2011, thereafter annually if applicable
Charlie-Gibbs South	D2010/2	SB, SW	E	-	-
	R2010/13	SB, SW	MM	AR, IB, MS, ND, TP	2011, thereafter annually if applicable
Charlie-Gibbs North High Seas	D2012/1	SW	E	-	-
	R2012/1	SW	MM	AR, IB, MS, ND, TP	2013, thereafter annually if applicable

3.2 Eutrophication (D5)

36. OSPAR's (thematic) strategic objective with regard to eutrophication is to combat eutrophication in its maritime area with the ultimate aim to achieve and maintain a healthy marine environment where anthropogenic eutrophication does not occur. This is largely based on Annex I and Appendices 1 and 2 of the Convention due to pollution mainly originating from land-based sources. 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.

37. Already at an early stage, the OSPAR Commission agreed on the following programmes and measures:

- a. PARCOM Recommendation 88/2 on the Reductions in Inputs of Nutrients to the Paris Convention Area (to reduce nutrient inputs to eutrophication problem areas by 50% relative to input levels in 1985, until new reduction targets are set for problem areas to move to non-problem area status);
- b. PARCOM Recommendation 89/4 on a Coordinated Programme for the Reduction of Nutrients.

Such a coordinated programme encompasses measures concerning agriculture, wastewater treatment plants, industry, aquaculture, nitrogen emissions from combustion of fossil fuel and detergents, *inter alia* by applying best available techniques, on the basis of national action plans.

- c. 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.

Reductions aimed at ammonia volatilisation; leaching of nitrogen, mainly nitrate; leaching, run-off and erosion losses of phosphorus; farm waste discharges. It was agreed that the measures annexed to the recommendation should all be applied, or some of them, giving preference to those which involve reduction of emissions at source. These measures may include regulatory and/or advisory measures and financial instruments. The list of measures is not exhaustive.

38. These OSPAR measures are largely covered by measures under existing EU legislation such as the Urban Waste Water Treatment Directive (91/271/EEC), the Nitrates Directive (91/676/EEC), the Industrial Emissions Directive on integrated pollution prevention and control (2010/75/EU) which are regarded as so-called basic measures for the implementation of the Water Framework Directive (2000/60/EC). The National Emission Ceilings Directive (2001/81/EC) is also important for the protection of the marine environment against emissions of NO_x to air. With regard to agricultural sources of nutrients the Rural Development Regulation (EC) No 1698/2005 supports funding of measures for environmental protection.

39. Implementation reporting on PARCOM Recommendations 89/4 and 92/7 has ceased in 2008 in view of the fact that that all Contracting Parties who reported were in compliance with the recommendations (cat. 1.a). It was also apparent that in 2005, six of nine reporting Contracting Parties met the 50% reduction target for phosphorus. However, most of the Contracting Parties had by then not yet achieved the 50% target for nitrogen. Three Contracting Parties had achieved a 50% reduction in nitrogen inputs, or of the order of 50%. Reported national reductions for 1985 – 2005 ranged between 20% and 48% for all Contracting Parties not yet meeting the 50% reduction target. The basis for calculating the reductions varied from country to country, and was not all based on the same sources of discharges, emissions and losses. Therefore, data could only be compared internally and it was not possible to compare the achievements of Contracting Parties on a common basis. The OSPAR Commission agreed in 2009 that implementation reporting for Recommendation 88/2 should pause until the reporting arrangements for PARCOM Recommendation 88/2 to support future implementation reporting should have been improved (cat. 1.b).²⁶

40. The Hazardous Substances and Eutrophication Committee will be working in 2015-2016 on (1) improved reporting of discharges and losses of nutrients, (2) the operationalisation of common indicators for eutrophication parameters, including riverine inputs of nutrients, and presenting monitoring results in assessment sheets, (3) the examination of national reports on the eutrophication status of Contracting Parties' waters, including the preparation of an integrated report, with a view to using these results in the

²⁶ Nutrients in the Convention Area – Assessment of Implementation of PARCOM Recommendations 88/2, 89/4 and 92/7 (OSPAR publication 257/2006). Nutrients in the Convention Area – Assessment of Implementation of PARCOM Recommendations 88/2/ and 89/4 (OSPAR publication 310/2008).

Intermediate Assessment 2017 (in support of EU Member States' review of their MSFD initial assessment in 2018). There is also discussion and further work planned on how to establish and apply transboundary nutrient targets between eutrophication assessment areas, with the assistance of model scenarios of nutrient reductions, in order to justify additional measures necessary, if any, to achieve non-problem area status.

41. Under the auspices of the MARPOL 73/78 Convention, in line with Appendix III to Annex IV of this Convention, environmental and economic impact assessments of shipping on the eutrophication status of the North Sea have been carried out that provide a basis for a possible joint submission to IMO justifying the case for designating the North Sea as a NO_x Emission Control Area (NECA).

3.3 Hydrographical conditions (D7)

42. The OSPAR Commission published in 2012 an advice document on MSFD descriptor 7 in which it considered approaches for target setting as follows:²⁷

- a good status for hydrographical conditions is hard to define;
- this descriptor is meant to address new developments;
- this descriptor is meant to address large-scale developments;
- this descriptor is meant to address permanent alterations.

43. The European Commission has indicated that this indicator is related to planned activities that will have to fulfil EIA requirements. It was concluded in OSPAR that any possible additional monitoring should be seen in the light of such activities. It was further advised that the most appropriate scale for assessing this Descriptor is one equivalent to EUNIS level 3.

44. It was recommended that unless there is evidence to the contrary, the requirements under the MSFD to address Descriptor 7 might be fulfilled if:

- measures have been identified under the WFD to safeguard GES;
- permanent changes of hydrographical conditions are restricted to the coastal waters;
- permanent changes of hydrographical conditions are assessed in the Initial Assessment.

45. However it has been recognised that, in the future, situations may occur where WFD does not apply i.e. outside of coastal waters or where EIA is not enough i.e. in picking up effectively cumulative effects. Examples are structures such as offshore windfarms, airports, and a tidal power barrage across the southern North Sea, etc.

46. Under the condition that effects of the permanent changes of hydrographical conditions are restricted to the coastal waters, it was recommended that Descriptor 7 does not need further work in OSPAR. The OSPAR Commission has adopted OSPAR Recommendation 2010/5 on assessments of environmental impact in relation to threatened and/or declining species and habitats, which is not yet fully implemented (cat. 1.b). This recommendation addresses amongst others the construction of structures at sea which may have consequences for hydrographical conditions and species and habitats. OSPAR has also established an Agreement on Sand and Gravel Extraction (agreement: 2003-15).

47. There are two measures relating to structures in the maritime area that OSPAR has regulated subject to Annex II of the Convention on the prevention and elimination of pollution by dumping. They will be addressed in the next chapter under paragraphs 3.4.3 and 3.4.4.

3.4 Contaminants (D8, D9)

²⁷ MSFD Advice document on Good environmental status - Descriptor 7: Hydrographical conditions. A living document - Version 17 January 2012 (OSPAR publication 583/2012).

3.4.1 Land-based sources of chemical pollution

48. Based on Annex I of the Convention on the prevention and elimination of pollution from land-based sources the OSPAR Commission's strategic objective is 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. The (thematic) 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.

49. To help establish priorities in OSPAR's work, countries agreed a List in 1998 (extended until 2004) on Chemicals for Priority Action.²⁸ This list contains on section A 29 substances or groups of substances in open use for which OSPAR background documents have been prepared or are being prepared (including reviews), 2 substances which are intermediates used in close systems (section B of the list) and 12 substances or groups of substances for which there is no current production or use (section C of the list). OSPAR background documents contain risk assessments on production, use and on discharges, emissions and losses to the marine environment, and consequently recommend actions on measures to be taken, not only by OSPAR but also including those recommended to the European Commission and other competent international organisations.

50. Table 3.1 contains information on OSPAR measures concerning the prevention and elimination of discharges and emissions of hazardous substances from industrial installations grouped per industrial sector (point sources). OSPAR Recommendations mainly address what constitutes Best Available Techniques for the sector, or parts thereof, and OSPAR Decisions then regulate discharge and emission limit values. These OSPAR measures are usually backed-up and justified by OSPAR background documents on BAT for the sectors concerned (to be downloaded from the OSPAR website under 'publications').

51. For all measures there is an indication in the table when the most recent overview assessment of their implementation has been published. All measures are categorised as fully implemented (cat. 1.a) for which reason implementation reporting has ceased for all individual measures. The discharges and emissions of the targeted substances from industrial installations relevant to the sectors are also covered by the Industrial Emissions Directive 2010/75/EU (integrated pollution and prevention control) for which reason there is an indication in table 3.1 of the current status of EU BAT Reference Documents.

52. Table 3.2 contains information concerning OSPAR measures on diffuse (or multiple) sources and international activities to cut emissions and discharges of OSPAR priority chemicals. OSPAR measures in this field often address restrictions of certain use of the substance (in some cases as part of BAT in industrial sectors) and the application of best environmental practice. For each measure there is an indication of implementation. All measures except Recommendation 2003/4 for dispersal of mercury from crematoria are categorised as fully implemented cat. (1.a) for which reason implementation reporting has ceased for all those individual measures. Further implementation reporting for Recommendation 2003/4 is scheduled for 2016 (cat. 1.b). For the use of pesticides there are two more general OSPAR measures concerning best environmental practice (both are fully implemented, cat. 1.a):

²⁸ OSPAR List of Chemicals for Priority Action (agreement 2004-12, revised 2011). These hazardous substances have been selected on the basis of the Dynamic Selection and Prioritisation Mechanism for Hazardous Substances (DYNAMEC, OSPAR publication 146/2002), revised in 2006 as New DYNAMEC Manual (OSPAR publication 256/2006) on the basis of the Agreement for Further Work in relation to the DYNAMEC Mechanism (agreement 2005-10).

- a. OSPAR Recommendation 2000/1 on Best Environmental Practice (BEP) for the Reduction of Inputs of Agricultural Pesticides to the Environment through the Use of Integrated Crop Management (implementation reporting ceased in 2010);
- b. OSPAR Recommendation 2000/2 on Best Environmental Practice (BEP) for the Use of Pesticides on Amenity Areas (implementation reporting ceased in 2003).

53. Under the heading of the column 'implementation reporting' in table 3.2 there is also an indication of the most recent published background document for OSPAR priority chemicals and any review statement where they exist (in brackets) in order to have access to any recommended action what further measures should be taken besides OSPAR measures. For this reason there is also an indication as to whether there is any corresponding EU legislation for marketing and use chemicals under the REACH (EC) No 1907/2006 Regulation, under pesticides legislation (Directives 91/414/EEC and 2009/128/EC, Regulations EC 1095/2007, EC 1107/2009, EU 283/2013 and EU 284/2013) and, concerning marketing and use of biocidal products Regulation (EU) No 528/2012. Finally there is an indication where corresponding other international regulation exist under UNECE or UNEP.

Table 3.1 OSPAR measures on point sources and their coverage by the Industrial Emissions Directive (IPPC) ²⁹.

Note: R = PARCOM or OSPAR Recommendation. D = PARCOM or OSPAR Decision. Cat. (1.a) = measure adopted and implemented (reporting ceased). Cat. (1.b) = measure adopted but not yet (fully) implemented (reporting ongoing). BREF = BAT Reference Document published by the EC under Article 13 of Directive 2010/75/EU. BATC = BAT conclusions. FD = formal draft of BREF (or review) sent to Art. 13 forum. D1/2/3 = the latest formal draft which is available. Source: <http://eippcb.jrc.ec.europa.eu/reference/>

Industrial sectors	OSPAR measures					IED (IPPC) BREF (year of adoption)
	Measure	BAT/BEP	Limit values for emissions and discharges	Implementation report (cat.)	Targeted substances	
Iron and steel industry (primary and secondary)	R92/2 R93/1	X	X	1996 (1.a) 2002 (1.a)	Phenol, PAHs, nitrogen	2001 and 2005 BATC (03.2012) BREF (03.2012)
	R92/3	X	X	1996 (1.a)	Hydrocarbons, cadmium, chromium, nickel, zinc, nitrogen dioxides	
	R91/3	X		1998 (1.a)	Cadmium, mercury, chlorinated oils, other chlorinated compounds, dioxin	
	R90/1	X		1994 (1.a)	Metals, PAHs, nitrogen oxides	
	R91/2	X		1994 (1.a)	Metals, PAHs, sulphur dioxides, nitrogen oxides, fluorides	
Non-ferrous metal industry (primary and secondary)	D96/1			2010 (1.a)	Phase-out of the use of hexachloroethane	2001 and 2005 FD (10.2014)
	R2002/1		X	2010 (1.a)	PAHs	
	R98/2		X	2010 (1.a)	Fluoride, PAHs	
	R92/1	X	X	2010 (1.a)	PAHs, fluorides	
	R94/1	X		2010 (1.a)	PAHs, fluorides, fluorocarbon gases, sulphur dioxides	
	R96/1	X		2010 (1.a)	Fluorides, sulphur dioxides	
	R98/1	X		2008 (1.a)	Cadmium, lead, mercury	
Surface treatment of metals	R92/4	X	X	2006 (1.a)	Chromium, copper, lead, nickel, silver, tin, zinc, unbound cyanide, volatile organic halogens	2006
Chlor-alkali industry	D80/2, D81/1 D81/2 D90/3 R85/1		X	2008 (1.a) for D90/3 all measures are part of annual report for the sector	Mercury	2001 BATC (12.2013)
	D82/1	X		idem	Mercury	
Textile industry	R97/1		reference values	2005 (1.a)	Antimony, arsenic, cadmium, chromium, cobalt, copper, lead, nickel, tin, zinc, organohalogen substances (e.g. PCBs, chlorine), organochlorine pesticides, organophosphorous pesticides	2003
	R94/5	X		2005 (1.a)		
Pharmaceutical industry	R92/5	X		2005 (1.a)	Heavy metals, halogenated and aromatic hydrocarbons, nutrients	
Organic chemical industry	R94/4	X		2004 (1.a)	Hydrocarbons, PAHs, organohalogen, heavy metals	2003 and 2006 D1 (04.2014)
Large combustion plants	R97/2	X		2002 (1.a)	Heavy metals, PAHs and other POPs	2006

²⁹ The IPPC Directive has been replaced by the IED Directive 2010/75/EU.

Industrial sectors		OSPAR measures				IED (IPPC) BREF (year of adoption)
		Measure	BAT/BEP	Limit values for emissions and discharges	Implementation report (cat.)	Targeted substances
						D1 (06.2013)
Pulp and paper industry		D96/2			2006 (1.a)	Phase-out of the use of molecular chlorine in bleaching. Target substances: dioxins
		D92/1		X	2005 (1.a)	Chlorinated organic substances
		D95/2		X	2006 (1.a)	Nitrogen oxides, sulphur dioxides
		D95/3		X	2006 (1.a)	Nitrogen oxides, gaseous sulphur, organic sulphuric compounds (methyl-mercaptan, di-methyl-sulphide, di-methyl-disulphide)
		R94/2 R94/3	X		2006 (1.a)	Nitrogen oxides, sulphur dioxides, organic substances
Vinyl chloride monomer (VCM) industry	VCM, 1,2-dichloroethane	D98/4 R96/2	X	X	2010 (1.a)	Vinyl chloride monomer, 1,2-dichloroethane, polychlorinated dibenzo-p-dioxins and dibenzofurans, hydrogen chloride, chlorinated hydrocarbon, copper, organohalogen substances
	Suspension PVC	D98/5 R96/3	X	X	2010 (1.a)	Vinyl chloride monomer, organohalogen substances
	Emulsion PVC	R2000/3 R99/1	X	X	2010 (1.a)	Vinyl chloride monomer, organohalogen substances
Refineries		R83/1 R89/5	X		2004 (1.a)	Hydrocarbons
Production, collection, regeneration and disposal of waste oils		R81/1	X		(cat. unknown)	Hydrocarbons
Reception facilities and oil terminals		R87/2		X	(cat. unknown)	Hydrocarbons

Table 3.2 OSPAR measures on diffuse sources and international activities to cut emissions and discharges of OSPAR priority chemicals

Note: D = PARCOM or OSPAR Decision, R = PARCOM or OSPAR Recommendation, A = limit values for emissions to air; W = limits for discharges to water, Cat. (1.a) = measure adopted and implemented (reporting ceased), Cat. (1.b) = measure adopted and not yet (fully) implemented (reporting ongoing), BD year = most recent OSPAR background document, (year) = review statement of OSPAR background document, PS = Water Framework Directive Priority Substance, PHS = Water Framework Directive Priority Hazardous Substance (status as at Directive 2013/39/EU); X = EC restriction applies, or substance is covered by the UN-ECE POP Protocol and the UNEP Stockholm POPs Convention; – EC restriction does not apply, or substance is not covered by the UN-ECE POP Protocol and the UNEP Stockholm POPs Convention; * = under consideration for inclusion in UNEP Stockholm POPs Convention

Substance (Section A of the OSPAR List of Chemicals for Priority Action)		OSPAR measures				Implementation reporting (cat.)	EC restrictions			EC WFD	International actions on POPs	
		Measure	Uses	BAT/BEP	Restrictions		Marketing and use	Biocide	Pesticide		UN-ECE	Stockholm
Metals and organometallic compounds	Cadmium	D85/2	Various sources		A/W	BD 2004 (2010) (1.a)	X	–	–	PHS	–	–
		D90/2	Batteries	X	X	BD 2004 (2010) (1.a)						
	Lead and organic lead compounds	–	–	–	–	BD 2009	X	–	–	PS	–	–
	Mercury and organic mercury compounds	R89/3	Discharges from various sources	X	Use of alternatives	2006 (1.a)	X	–	–	PHS	–	–
		R93/2	Discharges from dentistry	X	–	2006 (1.a)						
		R2003/4	Dispersal from crematoria	X	–	2011, 2016 (1.b)						
		R81/1	Thermometers, batteries, dental filters	X	–	BD 2004 (2010) (1.a)						
		D90/2	Batteries	X	X	BD 2004 (2010) (1.a)						
	Organic tin compounds	R87/1	Antifouling paints for use on sea-going vessels and underwater structures	–	X	2006 (1.a) BD 2011	X	X	–	PHS (TBTs)	–	–
		R88/1	Docking activities (sand-blasting etc.)	X	–	2006 (1.a) BD 2011						
Organic ester	Neodecanoic acid, ethenyl ester	–	–	–	–	BD 2011	X	–	–	–	–	–
Organohalogenes	PFOS	–	–	–	–	BD 2006 (2011)	X	–	–	PHS	X	X
	Tetrabromobisphenol-A	–	–	–	–	BD 2011	–	–	–	–	–	–
	Trichlorobenzenes	–	–	–	–	BD 2005 (2011)	X	–	–	PS	–	–
	Brominated flame retardants	–	–	–	–	BD 2009	X	–	–	TBDE, PBDE, HexaBDE, HeptaBDE: PHS	TBDE, PBDE, HexaBDE, HeptaBDE	TBDE, PBDE, HexaBDE, HeptaBDE

Substance (Section A of the OSPAR List of Chemicals for Priority Action)		OSPAR measures				Implementation reporting (cat.)	EC restrictions			EC WFD	International actions on POPs	
		Measure	Uses	BAT/BEP	Restrictions		Marketing and use	Biocide	Pesticide		UN-ECE	Stockholm
	Polychlorinated biphenyls (PCBs)	D92/3	Any use	–	Phase-out	2006 (1.a) BD 2004 (2008)	X	–	–	PHS (12 PCB-DLs)	X	X
	Polychlorinated dibenzodioxins and dibenzofurans (PCDDs, PCDFs)	–	–	–	–	BD 2007	X	–	–	PHS (7 PCDDs, 10 PCDFs)	X	X
	Short chained chlorinated paraffins	D95/1	Plasticiser in paints, coatings and sealants, use in metal work fluids and as flame retardants in rubber, plastics and textiles	–	Phase-out	2006 (1.a) BD 2009	X	–	–	PHS	X	*
Organic nitrogen comp.	4-(dimethylbutylamino) diphenylamin (6PPD)	–	–	–	–	BD 2006	–	–	–	–	–	–
Pesticides/ biocides/ organohalogen	Dicofol	–	–	–	–	BD 2004 (2008)	–	X	X	–	–	–
	Endosulfan	–	–	–	–	BD 2004 (2008)	–	X	X	PHS	–	X
	HCH isomers	–	–	–	–	BD 2002 (2008)	X	lindane	lindane	PHS	X	X
	Methoxychlor	–	–	–	–	BD 2004 (2008)	–	–	–	–	–	–
	Pentachlorophenol (PCP)	–	–	–	–	BD 2004	X	–	–	PS	–	*
	Trifluralin	–	–	–	–	BD 2005 (2012)	–	X	–	PHS	–	–
Pharmaceuticals	Clotrimazole	–	–	–	–	BD 2013	–	–	–	–	–	–
Phenols	2,4,6-tri-tert-butylphenol	–	–	–	–	BD 2006 (2009)	–	–	–	–	–	–
	Nonylphenol-ethoxylates	R92/8	Cleaning agents	–	Phase-out	2006 (1.a) BD 2009	X	–	X	NPs: PHS	–	–
	Octylphenol	–	–	–	–	BD 2006 (2009)	X	–	X	PS	–	–
Phthalate esters	Phthalates: dibutylphthalate (DBP), diethylhexyl-phthalate (DEHP)	–	–	–	–	BD 2006	X	–	–	DEHP: PHS	–	–
Polycyclic aromatic compounds	Polycyclic aromatic hydrocarbons (PAHs)	R96/4	One-component coal tar coating systems for inland ships	–	Phase-out	2006 (1.a) BD 2009	X	–	–	PHS	X	–
Synthetic musks	Musk xylene	–	–	–	–	BD 2004	X	–	–	–	–	–

3.4.2 Radionuclides

54. On the basis of Annex I of the Convention, 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.

55. 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.

56. PARCOM Recommendation 91/4 on radioactive discharges requires Contracting Parties to respect the relevant recommendations of the competent international organisations and to apply the Best Available Technology to minimise and, as appropriate, eliminate any pollution caused by radioactive discharges from all nuclear industries, including research reactors and reprocessing plants, into the marine environment. For the purpose of implementation reporting Contracting Parties present a statement on progress made in applying such technology every four years in accordance with the guidelines annexed to this Recommendation and updated from time to time.³⁰

57. The OSPAR Commission already published three reports (of overview assessments) on the "Implementation of PARCOM Recommendation 91/4 on Radioactive Discharges" in the years 2003, 2008 and 2012 (3rd, 4th and 5th round of implementation reporting). From all the information provided in the national reports, it was concluded that BAT had been applied in the nuclear installations of Contracting Parties. The Recommendation is therefore fully implemented (cat. 1.a). The Radioactive Substances Committee is keeping a briefing watch on the implementation of PARCOM Recommendation 91/4 as Contracting Parties are again reporting since 2013 with a view to producing a 6th round overview assessment of implementation reports in 2016. Additional relevant measures are OSPAR Decision 2001/1 on Substantial Reductions and Elimination of Discharges, Emissions and Losses of Radioactive Substances, with Special Emphasis on Nuclear Reprocessing and OSPAR Decision 2001/1 on the Review of Authorisations for Discharges or Releases of Radioactive Substances from Nuclear Reprocessing Activities (both cat. 1.a).

58. Although these OSPAR measures are part of the 'OSPAR *acquis*' concerning existing measures, recital (39) of the MSFD mentions that "Articles 30 and 31 of the Euratom Treaty regulate discharges and emissions resulting from the use of radioactive material and this Directive should therefore not address them".³¹ Finally, the OSPAR Convention (Article 3.3(a) of Annex II) prohibits the dumping of low and intermediate level radioactive substances, including waste. In addition to this prohibition there is also PARCOM Recommendation 91/5 on the Disposal of Radioactive Wastes into Sub-Seabed Repositories Accessed from land.

³⁰ Guidelines for the Submission of Information about, and the Assessment of, the Application of BAT in Nuclear Facilities (agreement: 2004-03).

³¹ For further information see also the EC "Information Note on the scope of the Marine Strategy Framework Directive in relation to radionuclides (status 21/05/2012)" as presented in meeting document RSC 13/10/1.

3.4.3. Sea-based sources offshore oil and gas industry

59. 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 activities³² 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. The objectives of the other OSPAR thematic strategies apply in so far as they relate to offshore activities.

60. 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.

61. Table 3.3 contains information on OSPAR measures preventing or minimising pollution in the marine environment resulting from activities during the exploration and exploitation of oil and gas resources in the sub-soil. The first set of measures addresses the use and discharge of drilling-fluids (decision for prohibition and reduction of harmful drilling fluids) and a management regime for cutting piles that resulted from drilling activities (recommendation). Implementation reporting for OSPAR Decision 2000/3 has ceased (fully implemented; cat. 1.a). The assessment of implementations reports on OSPAR Recommendation 2006/5 from three relevant Contracting Parties bordering the North Sea make the point that discharges of cuttings contaminated with oil have been prohibited by OSPAR for many years and it is clear from various surveys that there is no evidence of substantial oil loss and the sites of discharges have recovered substantially. OSPAR Recommendation 2006/5 appears to have confirmed that OSPAR Decision 2000/3 on the Use of Organic-phase Drilling Fluids (OPF) and the Discharge of OPF-Contaminated Cuttings has resulted in significant reduction in pollution and recovery of the seabed. The assessment indicated that there was no evidence of substantial loss of oil and immediate action was not required to reduce environmental impact of cutting piles. The management of cutting piles could be addressed as part of the decommissioning plan for the installations. The Offshore Industry Committee decided in 2009 to cease implementation reporting (cat. 1.a).

62. An important set of measures (decision, recommendations and guidelines) concerns the Harmonised Mandatory Control System for the use and reduction of discharge of offshore chemicals. These measures lay down the basis for substitution (and reduction) of harmful chemicals by less harmful substances. These measures are fully implemented (cat. 1.a). OSPAR Recommendation 2005/2 on environmental goals for the use and discharge of OSPAR Priority Chemicals has been fully implemented (cat. 1.a). A similar recommendation on environmental goals for the phasing-out of discharges of substances identified as candidates for substitution needs further work on implementation reporting (2017) and its implementation is therefore categorised as 1.b.

63. Another important set related to the production at offshore installations are the recommendations concerning the prevention and reduction of the discharge of oil and other substances with produced water and other oil containing waste water streams from platforms. They lay down emission limit values for oil and, for produced water, a reduction target for the annual quantity of oil of 15% in 2006 compared to 2000.³³ For OSPAR Recommendation 2001/1 (amended by Recommendations 2006/4 and 2011/8) implementation reports will still be assessed in 2017 as for some Contracting Parties it was difficult to achieve the 15% reduction target (cat. 1.b).

³² 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".

³³ Baseline figures for Recommendation 2001/1 (agreement: 2005-18).

64. On the follow-up on OSPAR Recommendation 2010/8 on the prevention of acute oil pollution, the OSPAR Commission in 2014 noted the conclusion of the Offshore Industry Committee that in light of the EU Directive 2013/30/EU on Offshore Safety and work underway in the EU, there was for the time being no need for a specific OSPAR measure further to OSPAR Recommendation 2010/8. Following earlier national reviews in ICG DRILLEX on this issue and the aforementioned conclusion of OIC 2012, the 2014 meeting of the Offshore Industry Committee invited three countries in Region 1 to detail their national regulations to prevent major incidents, and encouraged that the cooperation with the EU Offshore Authorities Group (EUOAG) should continue.

65. Regarding Annex II of the Convention (dumping of waste), table 3.3 also contains information on OSPAR measures concerning the prohibition of the disposal of disused offshore installations after ceasing production activities and for the (reduction of) dumping of wastes during the exploration and exploitation stages. The OSPAR Commission in 2013 concluded that the evidence available on decommissioning installations was not sufficient to enable the categories in Annex 1 to OSPAR Decision 98/3 to be revised in order to reduce the scope of possible derogations under paragraph 3 of the Decision, and that evidence will be gathered and considered again in 2018.

66. OSPAR Recommendation 2003/5 promotes the use and implementation of environmental management systems (EMS) by the offshore industry. Overview assessments of implementation reports were published in 2007 and 2012 and the latter indicated that in 2010 most operators had an EMS in place and usually made annual public statements about their implementation. Further implementation reporting will be carried out on a regular basis (cat. 1.b).

Table 3.3 OSPAR measures on point and diffuse sources of pollution from activities of offshore oil and gas production

Note: R = PARCOM, OSCOM or OSPAR Recommendation. D = PARCOM or OSPAR Decision. Cat. (1.a) = measure fully implemented (reporting ceased). Cat. (1.b) = measure not fully implemented (reporting ongoing). ELV = limit value for emissions and discharges.

Offshore industry activity	OSPAR measures						Remarks
	Measure	BAT/BEP	Limit values for emissions and discharges	Substitution of chemicals	Prohibition / phase-out	Implementation reporting (cat.)	
Drilling	D2000/3		X	ref. D2000/2	X	2003, 2007 (1.a)	Use and discharge of certain drilling fluids (diesel-based, organic phase)
	R2006/5	X	-	-	-	2009 (1.a)	Management regime for cutting piles ³⁴
Use and discharge of chemicals	D2000/2 (D2005/1)	-	-	X	-	2007 (1.a)	Authorisation requirements ³⁵
	R2010/3 (R2014/7)	-	-	X	-	2007 (1.a)	Data requirements (REACH compatible) ³⁶
	R2010/4	-	-	X	-	2007 (1.a)	Pre-screening of chemicals ³⁷
	R2005/2				Phase-out of discharges of OSPAR Priority Chemicals in 2010	2008, 2011 (1.a)	Environmental goals ³⁸
	R2006/3	-	-	-	Phase-out of discharges of substances candidate for substitution in 2017	2009, 2013, 2017 (1.b)	Environmental goals
Discharge of produced water	R2001/1	X	X	-	-	2003, 2005, 2010, 2013, 2017 (1.b)	ELV and reduction target for oil
	R2012/5	X	-	ref. D2000/2	-	2015, 2020 (1.b)	Risk-based approach ³⁹
Other waste water from production	R86/1	-	X	-	-	(cat. unknown)	ELV for oil (not covered by MARPOL) ⁴⁰

³⁴ Guidelines for the Consideration of the Best Environmental Option for the Management of OPF-Contaminated Cuttings Residue (agreement: 2002-08)

³⁵ Common Interpretation on Which Chemicals Are Covered and Not Covered by the Harmonised Mandatory Control System under OSPAR Decision 200/2. Updated in 2008 to take account of amendments to HMCS (agreement: 2002-6). OSPAR List of Substances Used and Discharged Offshore which Are Considered to Pose Little or No Risk to the Environment (PLONOR) (agreement: 2013-06)

³⁶ OSPAR Guidelines for Completing the Harmonised Offshore Chemical Notification Format (HOCNF) (agreement: 2012-05)

³⁷ Protocols on Methods for Testing of Chemicals Used in the Offshore Industry (agreement: 2005-11, revised in 2006). OSPAR Guidelines for toxicity testing of substances and preparations used and discharged offshore (agreement: 2005-12). Further Guidance on the Assessment of the Toxicity of Substances under the Harmonised Pre-Screening Scheme of OSPAR Recommendation 200/4 (agreement: 2002-4).

³⁸ Programme for the Establishment of Environmental Goals for Chemicals Discharged Offshore and the Implementation of such Goals (agreement: 2003-02).

³⁹ OSPAR Guidelines in support of Recommendation 2012/5 for a Risk-based Approach to the Management of Produced Water Discharges from Offshore Oil and Gas Installations (agreement: 2012-07).

⁴⁰ Minimisation of discharges and, where appropriate, the achievement of zero discharges of displacement water (agreement: 2003-04).

Offshore industry activity	OSPAR measures						Remarks
	Measure	BAT/BEP	Limit values for emissions and discharges	Substitution of chemicals	Prohibition / phase-out	Implementation reporting (cat.)	
Disposal of material	R77/1	-	-	-	X	(cat. unknown)	Reduction of dumped waste material by regulation
Disposal of disused installations	D98/3	-	-	-	X	Review of the D98/3 in 2018	Derogation of prohibition possible Notification in case a permit is issued for a disused offshore installation to be dumped or left wholly or partly in place

3.4.4 Other sea-based sources (disposal by dumping or placement)

67. On the basis of Annex II of the Convention incineration is prohibited as well as dumping of all wastes or other matter, except for, inter alia, (1) dredged material, (2) inert materials of natural origin, that is solid, chemically unprocessed geological material the chemical constituents of which are unlikely to be released into the marine environment, (3) sewage sludge until 31 December 1998, (4) fish waste from industrial fish processing operations, (5) vessels or aircraft until, at the latest, 31 December 2004. No wastes or other matter shall be dumped without authorisation by the competent authorities of Contracting Parties, or without regulation. Such authorisation or regulation is in accordance with the relevant applicable criteria, guidelines and procedures adopted by the OSPAR Commission.

68. The following criteria, guidelines and procedures, which are still relevant, exist:

- (a) OSPAR Guidelines for the Management of Dredged Material at Sea (agreement: 2014-06), including Explanatory notes – 204 Reporting Format for the Deposit at Sea of Dredged Material (agreement: 2014-07);
- (b) OSPAR Guidelines on Artificial Reefs in relation to Living Marine Resources (agreement: 2012-03);
- (c) OSPAR Guidelines for the Dumping of Fish Waste from Land-Based Industrial Fish Processing Operations (agreement: 1998-21).

Storage of CO₂ streams

69. On the basis of Annex II of the Convention 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 2007/1 prohibits the storage of carbon dioxide streams in the water column or on the sea-bed. No implementation reporting for this prohibition is required (cat. 1.a).

70. OSPAR Decision 2007/2 requires that the storage in geological formations of carbon dioxide streams from carbon dioxide capture processes shall not be permitted by Contracting Parties without authorisation or regulation by their competent authorities. Any authorisation or regulation shall be in accordance with the OSPAR Guidelines for Risk Assessment and Management of Storage of CO₂ Streams in Geological Formations (agreement: 2007-12), as updated from time to time. A decision to grant a permit or approval shall only be made if a full risk assessment and management process has been completed to the satisfaction of the competent authority and that the storage will not lead to significant adverse consequences for the marine environment, human health and other legitimate uses of the maritime area. The decision requires any permit or approval to comply with certain conditions. A notification to the OSPAR Commission by a Contracting Party is required in case of the issue of a permit, and subsequently a report to the Offshore Industry Committee.

3.5 Marine Litter (D10)

71. In order to achieve the objective of the Biological Diversity and Ecosystems Strategy, the OSPAR Commission will 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 the marine environment. OSPAR Ministers declared in 2010: "We note that quantities of litter in many areas of the North-East Atlantic are unacceptable, and therefore we will continue to develop reduction measures and targets, taking into consideration an ambitious target resulting in a reduction in 2020" (Bergen Statement).

72. In 2010, The Commission adopted OSPAR Recommendation 2010/19 on the Reduction of Marine litter through the Implementation of Fishing for Litter Initiatives. The purpose of this Recommendation is to promote the establishment of Fishing for Litter initiatives in fishing harbours of Contracting Parties and to facilitate: (1) the raising of awareness of the social, economic and ecological impacts of marine litter among fishermen and within the fishing industry, (2) a change in waste management practices within the fishing industry, and (3) the direct removal of marine litter from the marine environment within fishing areas.

Contracting Parties should promote the establishment of Fishing for Litter initiatives in line with the Guidance on Fishing for Litter projects (agreement: 2007-10). Implementation reporting has started in 2013 and a first overview and assessment of fishing for litter projects has been published (OSPAR publication 629/2014) and further work needs to be done in the Environmental Impacts of Human Activities Committee on the review of the arrangements set out in the Recommendation (cat. 1.b).

73. In 2014, the OSPAR Commission adopted the Regional Action Plan for Prevention and Management of Marine Litter in the North-East Atlantic (agreement: 2014-1) which contains four themes: (1) objectives, scope and principles, (2) actions, (3) monitoring and assessment, and (4) implementation and reporting. The RAP will be implemented during the period 2014-2021, after which time it shall be reviewed and updated in accordance with the outcome of the Quality Status Report 2021, the new OSPAR Strategy, and assessments under the MSFD. The RAP sets out actions to be implemented by Contracting Parties individually and – more than 30 - OSPAR actions to be taken collectively. The actions are divided into four themes: (1) actions to combat sea-based sources of marine litter, (2) actions to combat land-based sources of marine litter, (3) removal action, and (4) education and outreach.

74. The set of actions in the RAP for OSPAR collectively identifies, as far as currently possible, the type of OSPAR measure, the (co)lead parties and the anticipated year of implementation. Overseeing the current work package background documents and measures should be prepared, discussed and adopted mainly in 2015 and 2016, while the remainder of this type of work under the RAP will be finalised in 2017-2018. Cooperation with other organisations and competent (international) authorities will be an important part of the work. The RAP also requires Contracting Parties to report on implementation of their national actions every second year, starting in 2016. This work will increase when OSPAR measures are being adopted with additional implementation reports.

3.6 Underwater noise (D11)

75. In order to achieve the objective of the Biological Diversity and Ecosystems Strategy, the OSPAR Commission will 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. Until now work was, and is being undertaken on monitoring and assessment including the further development of a common register for impulsive noise and on a proposal for a jointly designed and implemented noise monitoring programme.

76. In 2014-2015 work will be undertaken to establish and keep up-to-date an inventory of underwater noise mitigation measures that will provide OSPAR Contracting Parties an overview of effectiveness and feasibility of mitigation options to avoid or reduce emissions and impacts of underwater noise. The inventory is an annotated list, a collation of existing practices and promotes discussion on current, developing and 'new' measures. Since there is considerable dynamic in the development of techniques and practices and improving knowledge about the impacts of underwater noise on the marine environment, maintaining an inventory will be a continuous process so will be periodically reviewed.

77. The inventory aims to provide an overview of national experiences on developing and applying measures. The inventory is designed to help avoid and reduce the introduction of underwater noise and/or its impacts on the marine environment through a common understanding of best mitigation options and by aiding Contracting Parties in their choice of options in the management of underwater noise sources and ultimately by the application of best available techniques (BAT) and best environmental practice (BEP), as defined in Appendix 1 to the OSPAR Convention, for activities generating underwater noise.

78. Priority has been given to those activities which are considered of prime concern. These are pile-driving, and seismic activities, and to a lesser extent shipping noise. Among other sources, consideration may also be given to high frequency impulsive sources (e.g. from echo sounders), dredging, explosions and sonar, noting that for managing military activities (explosives and sonar), OSPAR action may have limited impact. While vessels are a sector of concern, it is noted that IMO is the competent authority to address technical improvements for those ships which fall within its remit and that technical Guidelines is under way. There is opportunity for the OSPAR Commission to explore the scope for mitigation options for those vessels and shipping activities not covered by IMO.

Appendix 1: (source) Programmes of measures under the MSFD – Recommendations for implementation and reporting (EU Common Implementation Strategy, document MD 2014-2/2 REV, 25-11-2014)

Requirements for the development of measures

1.1 Article 13(1), MSFD, requires that Member States, in respect of each marine region or subregion concerned, shall identify the measures which need to be taken in order to achieve or maintain good environmental status, as determined pursuant to Article 9(1), in their marine waters. Those measures shall be devised on the basis of the initial assessment made pursuant to Article 8(1) and by reference to the environmental targets established pursuant to Article 10(1), and taking into consideration the types of measures listed in Annex VI.

Existing measures

1.2 Article 13(2), MSFD, requires that Member States shall integrate the measures devised pursuant to paragraph 1 into a programme of measures, taking into account relevant measures required under Community legislation, in particular Directive 2000/60/EC, Council Directive 91/271/EEC of 21 May 1991 concerning urban waste water treatment and Directive 2006/7/EC of the European parliament and of the Council of 15 February 2006 concerning the management of bathing water quality, as well as forthcoming legislation on environmental quality standards in the field of water policy, or international agreements.

New measures

1.3 Article 13(3), MSFD, requires that, when drawing up the programmes of measures pursuant to paragraph 2, Member States shall give due consideration to sustainable development and, in particular, to the social and economic impacts of the measures envisaged. To assist the competent authority or authorities referred to in Article 7 to pursue their objectives in an integrated manner, Member States may identify or establish administrative frameworks in order to benefit from such interaction. Member States shall ensure that measures are cost-effective and technically feasible, and shall carry out impact assessments, including cost-benefit analysis, prior to the introduction of any new measure.

Spatial protection measures

1.4 Article 13(4) requires that programmes of measures established pursuant to this Article shall include spatial protection measures, contributing to coherent and representative networks of marine protected areas, adequately covering the diversity of the constituent ecosystems, such as special areas of conservation pursuant to the Habitat Directive, special protection areas pursuant to the Birds Directive, and marine protected areas as agreed by the Community or Member States concerned in the framework of international or regional agreements to which they are parties.

Requirements for regional cooperation

1.5 Article 5(2) requires that Member States sharing a marine region or subregion shall cooperate to ensure that, within each marine region or subregion, the measures required to achieve the objectives of this Directive, in particular the different elements of the marine strategies referred to in points (a) and (b), are coherent and coordinated across the marine region or subregion concerned, in accordance with the following plan of action for which Member States concerned endeavour to follow a common approach:

.....

(b) programme of measures:

- (i) development, by 2015 at the latest, of a programme of measures designed to achieve or maintain good environmental status, in accordance with Article 13(1), (2) and (3);
- (ii) entry into operation of the programme provide for in point (1), by 2016 at the latest, in accordance with Article 13(10).

1.6 Article 13(8) requires that Member States shall consider the implications of their programmes of measures on waters beyond their marine waters in order to minimise the risk of damage to, and if possible have a positive impact on, those waters.

Requirements in relation to other policy frameworks

1.7 Article 13(5) requires that where Member States consider that the management of a human activity at Community or international level is likely to have a significant impact on the marine environment, particular in the areas addressed in paragraph (4), they shall, individually or jointly, address the competent authority or international organisation concerned with a view to the consideration and possible adoption of measures that may be necessary in order to achieve the objectives of this Directive, so as to enable the integrity, structure and functioning of ecosystems to be maintained or, where appropriate, restored.

1.8 Article 15 offers the possibility that where a Member State identifies an issue which has an impact on the environmental status of its marine waters and which cannot be tackled by measures adopted at national level, or which is linked to another Community policy or international agreement, it shall inform the Commission accordingly and provide justification to substantiate its view. The Commission shall respond within a period of six months.

Recommendations EU Common Implementation Strategy

1.9 EU CIS guidance is being developed on programmes of measures “recommendations for establishment, implementation and related reporting” and explains that a *Programme of Measures* (PoM) is a set of measures that the MS is responsible for implementing, put into context with each other, referring to the environmental targets they address. The Programme of Measures includes existing and new measures and they should be addressed as follows (also for the purpose of reporting):

Measures	Measure category	CEA	CBA
Article 13.1 & 13.2	EXISTING	No	No
<i>Measures relevant for the maintenance and achievement of GES under the MSFD that have been adopted under other policies and implemented</i>	1.a		
Article 13.1 & 13.2	EXISTING	No	No
<i>Measures relevant for the maintenance and achievement of GES under the MSFD that have been adopted under other policies but that have not yet been implemented or fully implemented</i>	1.b		
Art 13.3	NEW	Yes*	Yes*
<i>Additional measures to achieve GES which build on existing Community legislation and international agreements but go beyond what is already required under these</i>	2.a	Case by case	Case by case
Art 13.3	NEW	Yes	Yes
<i>Additional measures to achieve GES which do not build on existing Community legislation or international agreements</i>	2.b		

Note: "No" means that the cost-effectiveness analysis or cost-benefit analysis do not need to be done under MSFD.

The "Yes*" under category 2.a means that, depending on the existing legislation in question and if necessary, the scope of CEA/CBA is focused mainly on the additional contribution to the marine environment.

Appendix 2: (source) Annex I of the Marine Strategy Framework Directive 2008/56/EC (OJ No L 164/19; 25.06.2008)

Qualitative descriptors for determining good environmental status

- (1) Biological diversity is maintained. The quality and occurrence of habitats and the distribution and abundance of species are in line with prevailing physiographic, geographic and climatic conditions.
- (2) Non-indigenous species introduced by human activities are at levels that do not adversely alter the ecosystems.
- (3) Populations of all commercially exploited fish and shellfish are within safe biological limits, exhibiting a population age and size distribution that is indicative of a healthy stock.
- (4) All elements of the marine food webs, to the extent that they are known, occur at normal abundance and diversity and levels capable of ensuring the long-term abundance of the species and the retention of their full reproductive capacity.
- (5) Human-induced eutrophication is minimised, especially adverse effects thereof, such as losses in biodiversity, ecosystem degradation, harmful algae blooms and oxygen deficiency in bottom waters.
- (6) Sea-floor integrity is at a level that ensures that the structure and functions of the ecosystems are safeguarded and benthic ecosystems, in particular, are not adversely affected.
- (7) Permanent alteration of hydrographical conditions does not adversely affect marine ecosystems.
- (8) Concentrations of contaminants are at levels not giving rise to pollution effects.
- (9) Contaminants in fish and other seafood for human consumption do not exceed levels established by Community legislation or other relevant standards.
- (10) Properties and quantities of marine litter do not cause harm to the coastal and marine environment.
- (11) Introduction of energy, including underwater noise, is at levels that do not adversely affect the marine environment.



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