



# Implementation of OSPAR measures

## A Progress Report

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**OSPAR**  
COMMISSION

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OSPAR Convention

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

Convention OSPAR

La Convention pour la protection du milieu marin de l’Atlantique du Nord-Est, dite Convention OSPAR, a été ouverte à la signature à la réunion ministérielle des anciennes Commissions d’Oslo et de Paris, à Paris le 22 septembre 1992. La Convention est entrée en vigueur le 25 mars 1998. Les Parties contractantes sont l’Allemagne, la Belgique, le Danemark, l’Espagne, la Finlande, la France, l’Irlande, l’Islande, le Luxembourg, la Norvège, les Pays-Bas, le Portugal, le Royaume-Uni de Grande Bretagne et d’Irlande du Nord, la Suède, la Suisse et l’Union européenne.

This report was compiled by **Richard Emmerson** (Swedish Agency for Water and Marine Management) as convenor of the OSPAR Task Group on the Measures and Actions Programme with the support of the OSPAR Secretariat (**Lucy Ritchie, Ellie Dening, Lena Avellan, Jo Foden, Laura de la Torre and Philip Stamp**) and the Chairs of the OSPAR Committees (**Jeroen Vis/Michael McLeod (BDC), Lex Oosterbaan/ John Mouat (EIHA), Philip Axe (HASEC), Saravan Marappan (OIC) and Justin Gwynn (RSC).**



# Introduction and summary

## North-East Atlantic Strategy 2010-2020

Contracting Parties to the OSPAR Convention have the duty to take all possible steps to prevent and eliminate pollution and to take the necessary measures to protect the Maritime Area against adverse effects of human activities so as to safeguard human health and to conserve marine ecosystems and, when practicable, restore marine areas which have been adversely affected (Article 2 OSPAR Convention).


OSPAR adopts measures either in the form of OSPAR Decisions that are legally binding under international law or OSPAR Recommendations. OSPAR agrees on programmes of action or guidance aiming for coordinated approaches as OSPAR Agreements.

Under the North-East Atlantic Environment Strategy (NEAES) 2010-2020 the OSPAR Commission has been guided by the vision of a clean, healthy and biologically diverse North-East Atlantic Ocean, used sustainably. The OSPAR Commission's role has been to harmonise policies and strategies, including by drawing up programmes and measures, to ensure the protection of the marine environment. The OSPAR Commission fulfils its role through addressing five themes under the NEAES 2020: biodiversity, eutrophication, hazardous substances, the offshore oil and gas industry and radioactive substances.


OSPAR Contracting Parties that are EU Member States have agreed that OSPAR should be the main platform through which they coordinate their work to implement the EU Marine Strategy Framework Directive (MSFD) in the North-East Atlantic. The MSFD establishes a framework within which to take the necessary measures to achieve or maintain good environmental status in the marine environment.

This report aims to provide an update on the progress made with implementation of measures adopted within the competence of the OSPAR Commission. The findings of the report support the evaluation of progress of the North-East Atlantic Environment Strategy 2010-2020. This report provides a basis for an assessment of the effect of OSPAR measures on the marine environment, which will


be developed as a next step through the OSPAR Quality Status Report (QSR) scheduled for publication in 2023. As such, this report is one of the assessments that form a basis for the QSR 2023.



**OSPAR Recommendations with programmes of action for 38 species and 16 habitats**



**552 Marine Protected Areas**



**Full implementation of measures to manage impacts of the offshore industry and of radionuclides in discharges from the nuclear industry**

## Successes

### OSPAR's measures and actions programme over the period 2010-2020 has focused on:

- development of measures for the protection and conservation of biodiversity identified for priority action which has resulted in the adoption of OSPAR Recommendations with programmes of action for 38 species and 16 habitats and the completion of 3 rounds of reporting in the implementation of these measures. This work has created a solid foundation for prioritised national and collective actions to protect threatened and/or declining features.
- consolidation of OSPAR's network of Marine Protected Areas (MPAs), including in Areas Beyond National Jurisdiction (ABNJ), which has resulted in 552 MPAs being nominated to the OSPAR MPA network, with annual implementation reporting through a data call to also maintain up to date information about the MPAs in an OSPAR MPA database.
- full implementation, review and updating of measures to manage impacts of the offshore industry.
- full implementation of measures and continued reporting on discharges of radionuclides in discharges from the nuclear industry.

OSPAR has also maintained a watching brief on the measures being taken by other competent authorities in the fields of management of land-based sources of hazardous substances and nutrients, and the management of fisheries and other human activities with the potential to impact biodiversity. Where needed OSPAR brought matters of importance to the attention of other relevant management bodies.

## Challenges

Effective protection of the marine environment requires a consistent and harmonised implementation of measures across all Contracting Parties. The OSPAR Commission's oversight of the degree of implementation and the methods of implementation by different Contracting Parties needs to provide a basis for an active sharing of best practice and lessons learned on effectiveness of measures. This in turn needs to support an adaptive management through identification of obstacles and challenges to progress and identification of the steps needed to ensure a high degree of effectiveness of measures at the regional scale.

OSPAR Recommendations on species and habitats include actions to be implemented nationally as well as collectively by the OSPAR Commission itself. While OSPAR Contracting Parties continue to focus on implementation of national actions there has been a particular challenge in ensuring that there are sufficient resources to move forward with the implementation of collective actions on behalf of the OSPAR Commission. Developing oversight of the implementation of the large number of measures addressing species and habitats has also required new approaches.

Several national initiatives for setting targets for the reduction of nutrient inputs have been completed, however coordination to reduce nutrient inputs to the marine environment has been hindered by a lack of agreement between Contracting Parties and a lack of regionally consistent threshold values for eutrophication indicators.

Measures aimed at a phase out the discharge of chemicals that are, or contain substances identified as candidates for substitution from the offshore oil and gas industry have proved challenging due to technical and safety reasons as well as differing national classification systems and approaches to implementation.

It has also been difficult to draw consistent conclusions across the different fields of OSPAR's work on the status of implementation of OSPAR measures as well as on the issues that need to be tackled to make progress. Implementation reporting against the OSPAR Recommendations follows a specific template. The development of this report on progress with implementation has identified some difficulties in interpreting the reported information and understanding the completeness of implementation. For some measures it is difficult to state whether an action has been fully implemented and completed or whether it is a continuous action which while being fully implemented continues to serve a function for environmental protection.

## Outlook and next steps

The MAP matrix has been developed to maintain continuous oversight of the implementation of measures. This tool will be developed by the OSPAR Commission in the coming years to be referred to as a source of information on progress being made with measures.

This progress report on the status of implementation of OSPAR measures and further work to consider the effectiveness of these measures in reducing pressures on and improving the status of the marine environment has the aim to bring more specificity to the implementation reporting.

The OSPAR Commission carries out a large number of environmental status assessments. The status of the environment is the ultimate indication of whether the measures implemented by OSPAR have been effective. This report which evaluates the implementation of measures provides the basic information for an assessment of effectiveness to contribute to the QSR 2023.

# Introduction et récapitulatif

Dans le cadre de la Convention OSPAR, les Parties contractantes prennent toutes les mesures possibles afin de prévenir et de supprimer la pollution, ainsi que les mesures nécessaires à la protection de la zone maritime contre les effets préjudiciables des activités humaines, de manière à sauvegarder la santé de l'homme et à préserver les écosystèmes marins et, lorsque cela est possible, à rétablir les zones marines qui ont subi ces effets préjudiciables (Article 2 de la Convention OSPAR).

OSPAR adopte des mesures sous la forme de Décisions OSPAR qui sont juridiquement contraignantes en vertu du droit international ou de Recommandations OSPAR. OSPAR convient de programmes d'action ou d'orientations visant des approches coordonnées sous forme d'Accords OSPAR.

Dans le cadre de la Stratégie pour le milieu marin de l'Atlantique du Nord-Est (NEAES) 2010-2020, la Commission OSPAR a été guidée par la vision d'un océan Atlantique du Nord-est propre, sain et biologiquement diversifié, utilisé de manière durable. Le rôle de la Commission OSPAR a été d'harmoniser les politiques et les stratégies, notamment en élaborant des programmes et des mesures, pour assurer la protection du milieu marin. La Commission OSPAR remplit son rôle en abordant cinq thèmes dans le cadre de la NEAES 2020 : la biodiversité, l'eutrophisation, les substances dangereuses, l'industrie pétrolière et gazière offshore et les substances radioactives.

Les Parties contractantes d'OSPAR qui sont également des Etats membres de l'UE ont convenu qu'OSPAR devrait être la principale plateforme par laquelle elles coordonnent leur travail de mise en œuvre de la Directive cadre Stratégie pour le milieu marin (DCSMM) de l'UE dans l'Atlantique du Nord-est. La DCSSM établit un cadre pour prendre les mesures nécessaires afin d'atteindre ou de maintenir un bon état écologique du milieu marin.

Le présent rapport vise à fournir une mise à jour des progrès accomplis eu égard à la mise en œuvre des mesures adoptées et relevant de la compétence de la Commission OSPAR. Les conclusions du rapport soutiennent l'évaluation des progrès réalisés par rapport

à la Stratégie pour le milieu marin de l'Atlantique du Nord-est 2010-2020. Ce rapport fournit une base pour l'évaluation de l'effet des mesures OSPAR sur le milieu marin, qui sera développée comme prochaine étape dans le cadre du Bilan de santé (QSR) d'OSPAR dont la publication est prévue en 2023. En tant que tel, ce rapport est l'une des évaluations qui constituent une base pour le QSR 2023.

## Réussites

### Le programme de mesures et actions d'OSPAR pendant la période de 2010 à 2020 s'est concentré sur :

- L'élaboration de mesures pour la protection et conservation de la biodiversité identifiée pour une action prioritaires. Cela a abouti à l'adoption de Recommandations OSPAR avec des programmes d'action pour 38 espèces et 16 habitats et à l'achèvement de 3 cycles de notification de la mise en œuvre de ces mesures. Ce travail a créé une base solide pour des actions nationales et collectives prioritaires visant à protéger les caractéristiques menacées et/ou en déclin.
- La consolidation du réseau OSPAR d'aires marines protégées (AMP), y compris dans la zone au-delà de la juridiction nationale (ABNJ). Le réseau comporte actuellement 552 AMP ; un rapport annuel de mise en œuvre est élaboré par le biais d'un appel de données pour maintenir également des informations à jour sur les AMP dans une base de données OSPAR d'AMP.
- La mise en œuvre, la révision et la mise à jour complètes des mesures visant à gérer les impacts de l'industrie offshore.
- La mise en œuvre complète des mesures et la notification continue des rapports sur les rejets de l'industrie nucléaire.

OSPAR a également maintenu une veille sur les mesures prises par d'autres autorités compétentes dans les domaines de la gestion des sources terrestres de substances dangereuses et de nutriments, et de la gestion de la pêche et d'autres activités humaines susceptibles d'avoir un impact sur la biodiversité. Lorsque cela s'est avéré nécessaire, OSPAR a porté les questions d'importance à l'attention d'autres organes de gestion pertinents.

## Défis

Une protection efficace du milieu marin nécessite une mise en œuvre cohérente et harmonisée des mesures par toutes les Parties contractantes. La surveillance par la Commission OSPAR du degré de mise en œuvre et des méthodes de mise en œuvre par les différentes Parties contractantes doit fournir une base pour un partage actif des meilleures pratiques et des leçons apprises sur l'efficacité des mesures. Ceci doit à son tour soutenir une gestion adaptative par l'identification des obstacles et des défis au progrès et l'identification des étapes nécessaires pour assurer un haut degré d'efficacité des mesures à l'échelle régionale.

Les Recommandations OSPAR sur les espèces et habitats comprennent des actions à mettre en œuvre au niveau national ainsi que collectivement par la Commission OSPAR elle-même. Alors que les Parties contractantes d'OSPAR continuent de se concentrer sur la mise en œuvre des actions nationales, il a été particulièrement difficile de s'assurer qu'il y ait suffisamment de ressources pour faire avancer la mise en œuvre des actions collectives au nom de la Commission OSPAR. Le développement de la surveillance de la mise en œuvre du grand nombre de mesures concernant les espèces et les habitats a également nécessité de nouvelles approches.

Plusieurs initiatives nationales visant à fixer des objectifs de réduction des apports de nutriments ont été menées à bien, mais la coordination de la réduction des apports de nutriments dans le milieu marin a été entravée par l'absence d'accord entre les Parties contractantes et le manque de valeurs seuils cohérentes au niveau régional pour les indicateurs d'eutrophisation.

Des mesures visant à éliminer progressivement les rejets de substances chimiques qui sont ou contiennent des substances identifiées comme candidates à la substitution par l'industrie pétrolière et gazière offshore se sont avérées difficiles à mettre en œuvre pour des raisons techniques et de sécurité, ainsi qu'en raison des différences entre les systèmes de classification nationaux et les approches de la mise en œuvre.

Il s'est avéré difficile de tirer des conclusions cohérentes à travers les différents domaines de travail d'OSPAR sur l'état de la mise en œuvre des mesures OSPAR ainsi que sur les questions qui doivent être abordées

pour progresser. Les rapports de mise en œuvre des recommandations OSPAR suivent un modèle spécifique. L'élaboration de ce rapport sur l'état d'avancement de la mise en œuvre a permis d'identifier certaines difficultés d'interprétation des informations rapportées et de compréhension de l'exhaustivité de la mise en œuvre. Pour certaines mesures, il est difficile d'indiquer si une action a été entièrement mise en œuvre et achevée ou s'il s'agit d'une action continue qui, tout en étant entièrement mise en œuvre, continue à remplir une fonction pour la protection de l'environnement.

## Perspective et prochaines étapes

La matrice MAP a été développée pour maintenir une surveillance continue de la mise en œuvre des mesures. Cet outil sera développé par la Commission OSPAR dans les années à venir afin d'y faire référence comme source d'information sur les progrès réalisés en ce qui concerne les mesures.

Ce rapport d'avancement sur l'état de la mise en œuvre des mesures OSPAR et les travaux supplémentaires visant à examiner l'efficacité de ces mesures en ce qui concerne la réduction des pressions exercées sur le milieu marin et l'amélioration de son état a pour objectif d'apporter plus de spécificité à la notification de la mise en œuvre.

La Commission OSPAR réalise un grand nombre d'évaluations de l'état de l'environnement. L'état de l'environnement est l'indication ultime pour savoir si les mesures mises en œuvre par OSPAR ont été efficaces. Ce rapport qui évalue la mise en œuvre des mesures fournit les informations de base pour une évaluation de l'efficacité afin de contribuer au QSR 2023.



Method for this evaluation

Article 22 of the OSPAR Convention requires that the Contracting Parties report to the OSPAR Commission at regular intervals on the steps they have taken to implement OSPAR Decisions and Recommendations, the effectiveness of the measures and problems encountered in the implementation. The legal text of OSPAR's Decisions or Recommendations includes requirements for this implementation reporting in the form of a timeframe and format for reporting.

The OSPAR Commission organises evaluations of Contracting Parties' reporting on the implementation of OSPAR Decisions and Recommendations through the thematic committees. "Overview Assessments of implementation" (or equivalent documents) are published on the OSPAR website and are one means by which the OSPAR Commission fulfils the requirements on compliance of Article 23 of the Convention. They include considerations and advice to the Commission on how to encourage compliance.

Over the period of the 2010-2020 NEAES OSPAR has developed its Measures and Actions Programme (MAP) as an overarching and integrative instrument to support the future planning, development and reporting of actions and measures. The MAP aims to internally structure OSPAR's approach to measures and externally enhance the visibility and transparency of what OSPAR has achieved and is currently working on. A first product has been the [MAP matrix](#) on the OSPAR website which provides a fully accessible database of the OSPAR acquis of measures.

As a contribution to the review of the NEAES 2010-2020 the MAP matrix has been extended to capture standardised conclusions on the state of implementation of each Decision and Recommendation, including in each OSPAR Region, and the issues that need to be addressed to complete implementation. This progress report is based on a first collection of information on these questions and sets this within a qualitative report on the progress that OSPAR has made through the Decisions and Recommendations it has adopted within its competence.

Report Key

Based upon the information collected in the extended MAP matrix the following summary information has been derived:	
Performance on reporting (i.e. percentage of Contracting Parties to who a Decision or Recommendation is applicable who have reported in period 2010-2020;	
Overall conclusions on the status of implementation of measures where implementation reports have been assessed during the period 2010-2020 and relevant conclusions have been drawn;	
Information on the percentage of Contracting Parties that have reported that they have fully implemented the measure (only possible where this information has been collected).	
In addition, an overall summary is given of the status of the measures under each thematic strategy (i.e. the measures under OSPAR's acquis). This uses the following colours scheme.	
<div></div>	Fully implemented
<div></div>	In progress
<div></div>	Not implemented
<div></div>	Unknown
<div></div>	Set aside (fully implemented or overtaken by other international measures) but still retained in OSPAR's acquis.
<div></div>	No implementation reporting requirement. For some measures reporting in implementation takes places on an ad-hoc basis.

The information collected in the extended MAP matrix will be consolidated over the coming cycles of implementation reporting. It is also planned to develop a more systematic overall structure for expressing conclusion on the effectiveness of measures.

Biodiversity and ecosystems strategy

NEAES 2010-2020 Strategy Objective

To halt and prevent by 2020 further loss of biodiversity in the OSPAR Maritime Area, to protect and conserve ecosystems, and to restore, where practicable, marine areas which have been adversely affected.

What is the issue?

Marine species, habitats and ecosystems are sensitive to pressures from human activities and there is general agreement that marine biodiversity globally is facing unprecedented threats as a result of human activities in the marine environment, land-based inputs to the sea and climate change.

Where do we stand?

OSPAR has been working since the adoption of Annex V to the Convention in 1998 on the protection and conservation of the ecosystems and biological diversity of the Maritime Area, to identify, protect and conserve those species, habitats, and ecosystem processes in the North-East Atlantic which are most vulnerable to harm. During the period covered by the North-East Atlantic Environment Strategy 2010-2020 this work has focused on:

- developing and implementing programmes and measures within OSPAR's competence for protection of [threatened and/or declining species and habitats](#) identified for priority action and building engagement and cooperation with other authorities;
- developing the OSPAR network of [Marine Protected Areas](#), including in Areas Beyond National Jurisdiction, ensuring that the network is ecologically coherent and well-managed, and;
- building engagement and cooperation with other competent authorities.

What have we committed to do?

Recommendations on the protection and conservation of species and habitats

Starting from 2010 OSPAR has adopted Recommendations aiming to protect 56 species and habitats it has identified as threatened and/or declining and in need of protection. These represent birds, fish, mammals and invertebrates, as well as shallow and deep-sea habitats, found in the OSPAR Maritime Area. Some are iconic and very rare features, like the blue whale or hydrothermal vents in the deep sea. Others like cod and harbour porpoise, are found commonly in some OSPAR Regions, but not in others. The Recommendations set out a series of actions that Contracting Parties should consider for the protection and conservation of the species and habitats and implement nationally. Each Recommendation then sets out a set of actions that Contracting Parties are to address collectively through the OSPAR Commission (see Table 1). In 2016, OSPAR adopted a [Roadmap for the implementation of collective actions within the Recommendations for the protection and conservation of OSPAR listed Species and Habitats](#) to guide the collective implementation of these actions. A full list of these Recommendations is at Table 2.



**Table 1.** Examples of national and collective actions recommended by OSPAR for consideration by Contracting Parties for the protection and conservation of threatened/ and or declining species and habitats.

Examples of national actions
<ul style="list-style-type: none"><li>■ Promoting and implementing conservation measures</li><li>■ Implementing measures to protect the species or habitats in national legislation</li><li>■ Assessing effectiveness of existing management measures and determine what further national measures are needed to address key threats to the species or habitat</li><li>■ Setting up sufficient capacity for monitoring and assessment of the species or habitat</li><li>■ Promoting funding for research where knowledge gaps exist</li><li>■ Raising awareness of the status of species and habitats among key marine users</li><li>■ Increasing knowledge and improving the way this information is fed back into decision making</li><li>■ Paying attention to the species and habitats in the designation of marine protected areas cooperating with the international competent authorities to promote management measures.</li></ul>
Examples of collective actions
<ul style="list-style-type: none"><li>■ Setting up OSPAR monitoring and assessment frameworks, including habitat mapping</li><li>■ Developing and implementing OSPAR action plans for key issues</li><li>■ Promoting initiatives to improve the knowledge base with science organisations</li><li>■ Cooperating with the international competent authorities to promote management measures,</li><li>■ 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.</li></ul>

**Decisions and Recommendations on the OSPAR Network of Marine Protected Areas**

OSPAR [Recommendation 2003/3](#) (as amended by Recommendation 2010/2) on a Network of Marine Protected Areas sets out the goal for Contracting Parties to continue the establishment of an ecologically coherent network of well-managed marine protected areas. Contracting Parties with marine waters are recommended to nominate sites to the OSPAR Network of MPAs both in their national waters. Collectively the OSPAR Commission has adopted [OSPAR Decisions](#) on the establishment of 7 MPAs in ABNJ/in the High Seas and [OSPAR Recommendations](#) 2010/11-2010/17 and 2012/01 on the management of these sites.

**Implementation reporting during the period 2010-2020**

**Implementation reporting on species and habitats measures**

Three rounds of implementation reporting on the OSPAR Recommendations for threatened and/or declining species and habitats have taken place so far. The first in 2013 focused on 18 species and habitats for which OSPAR Recommendations were adopted between 2010 and 2012. A further 32 species and habitats were the focus of implementation reporting in 2016. A third implementation reporting round on all Recommendations was completed on 31 December 2019. An evaluation of the performance of Contracting Parties with this reporting over the three reporting rounds is shown in Table 2. This expresses the percentage of Contracting Parties to whom the recommendations are applicable in each region who have reported at least once. Further reporting on implementation of the measures will take place every six years after 2019.






**Table 2:** OSPAR measures for the protection and conservation of species and habitats identified as priorities for action ([OSPAR List of threatened and/or declining species and habitats](#) (OSPAR Agreement 2008-6)) showing performance with implementation reporting over the reporting rounds in 2013, 2016 and 2019. Performance is expressed as a ratio for each OSPAR region showing the number of Contracting Parties that have reported out of the number to whom Recommendations are applicable.

COMMON NAME	OSPAR measure	OSPAR Regions where the species occurs	OSPAR Regions where the species is under threat and/or in decline	Implementation reports (every 6 years after 2019) (cat.)	Performance with reporting on implementation of national actions (% of applicable CPs reporting)				
Invertebrates					I	II	III	IV	V
Ocean quahog	R2013/05	I, II, III, IV	II	2016, 2019 (1.b)		6/6			
Azorean barnacle	-	V	All where it occurs	-					
Dog whelk	-	All	II, III, IV	-					
Flat oyster	R2013/04	I, II, III, IV	II	2016, 2019 (1.b)		8/8	2/3	2/3	
Azorean limpet	R2015/02	V	All where it occurs	2016, 2019 (1.b)					0/1
BIRDS									
Lesser black-backed gull	R2011/01	I	All where it occurs	2013, 2019 (1.b)	1/3				
Ivory gull	R2011/02	I	All where it occurs	2013, 2019 (1.b)	1/3				
Steller's eider	R2013/12	I	All where it occurs	2016, 2019 (1.b)	1/1				
Little shearwater	R2011/03	V	All where it occurs	2013, 2019 (1.b)					1/5
Balearic shearwater	R2011/04	II, III, IV, V	All where it occurs	2013, 2019 (1.b)		6/8	2/3	2/3	4/6
Black-legged kittiwake	R2011/05	I, II, III, IV, V	I, II	2013, 2019 (1.b)	3/4	7/8			
Roseate tern	R2011/06	II, III, IV, V	All where it occurs			2/4	2/3	1/3	1/6
Iberian guillemot	R2014/16	IV	All where it occurs	2016, 2019 (1.b)				1/3	
Thick-billed murre	R2011/07	I	All where it occurs	2013, 2019 (1.b)	2/3				
FISH									
Sturgeon	R2014/01	II, IV	All where it occurs	2016, 2019 (1.b)		3/5		2/3	
Allis shad	R2015/04	II, III, IV	All where it occurs	2016, 2019 (1.b)		5/5	2/3	2/3	
European eel	R2014/15	I, II, III, IV	All where it occurs	2016, 2019 (1.b)	2/3	7/7	2/3	2/3	
Portuguese dogfish	R2014/05	All	All where it occurs	2016, 2019 (1.b)	1/3	2/4	2/3	2/3	2/6
Gulper shark	R2014/03	IV, V	All where it occurs	2016, 2019 (1.b)				2/3	4/6
Leafscale gulper shark	R2014/04	All	All where it occurs	2016, 2019 (1.b)	1/4	2/4	2/3	2/3	2/6
Basking shark	R2010/06	All	All where it occurs	2013, 2019 (1.b)		8/8	2/3	2/3	
Houting	-	II	All where it occurs	-					
Common Skate	R2010/06	All	All where it occurs	2013, 2019 (1.b)		8/8	2/3	2/3	
Spotted Ray	R2014/07	II, III, IV, V	All where it occurs	2016, 2019 (1.b)		6/6	2/3	2/3	3/6
Cod	R2014/14	All	II, III	2016, 2019 (1.b)		7/8	2/3		
Long-snouted seahorse	R2012/03	II, III, IV, V	All where it occurs	2013, 2019 (1.b)		4/5	2/3	2/3	3/6
Short-snouted seahorse	R2012/02	II, III, IV, V	All where it occurs	2013, 2019 (1.b)		4/5	2/3	2/3	3/6
Orange roughy	R2010/07	I, V	All where it occurs	2013, 2019 (1.b)	3/4				3/6
Porbeagle shark	R2014/06	All	All where it occurs	2016, 2019 (1.b)	3/4	5/6	2/3	2/3	3/6
Sea lamprey	R2015/03	I, II, III, IV	All where it occurs	2016, 2019 (1.b)	3/4	6/7	2/3	2/3	

Thornback skate / ray	R2014/08	I, II, III, IV, V	II	2016, 2019 (1.b)		7/8			
White skate	R2010/06	II, III, IV	All where it occurs	2013, 2019 (1.b)		8/8	2/3	2/3	
Salmon	R2016/03	I, II, III, IV	All where it occurs	2019 (1.b)	2/4	6/7	2/3	1/3	
[Northeast Atlantic] spurdog	R2014/02	All	All where it occurs	2016, 2019 (1.b)	3/4	7/8	2/3	2/3	3/6
Angel shark	R2010/06	II, III, IV	All where it occurs	2013, 2019 (1.b)		8/8	2/3	2/3	
Bluefin tuna	-	V	All where it occurs	-					
REPTILES									
Loggerhead turtle	R2013/07	IV, V	All where it occurs	2016, 2019 (1.b)				2/3	2/6
Leatherback turtle	R2013/06	All	All where it occurs	2016, 2019 (1.b)	3/4	2/5	2/3	2/3	2/6
MAMMALS									
Bowhead whale	R2013/08	I	All where it occurs	2016, 2019 (1.b)	1/3				
Blue whale	R2013/09	All	All where it occurs	2016, 2019 (1.b)	2/4	2/4	1/2	1/2	2/6
Northern right whale	R2013/10	All	All where it occurs	2016, 2019 (1.b)	1/4	1/3	1/2	1/2	33
Harbour porpoise	R2013/11	All	II, III	2016, 2019 (1.b)		7/8	2/3		
HABITATS									
Carbonate mounds	R2014/10	I, V	V	2016, 2019 (1.b)					2/6
Coral Gardens	R2010/09	I, II, III, IV, V	All where they occur	2013, 2019 (1.b)	3/4	4/6	2/3	2/3	3/6
Cymodocea meadows	R2014/12	IV	All where they occur	2016, 2019 (1.b)				2/3	
Deep-sea sponge aggregations	R2010/10	I, III, IV, V	All where they occur	2013, 2019 (1.b)	3/4		2/3	2/3	3/6
Intertidal Mytilus edulis beds on mixed and sandy sediments	R2015/01	II, III	All where they occur	2016, 2019 (1.b)		7/7	2/3		
Intertidal mudflats	R2016/02	I, II, III, IV	All where they occur	2019 (1.b)	2/4	7/8	2/3	1/3	
Littoral chalk communities	R2013/01	II	All where they occur	2016, 2019 (1.b)		2/2			
Lophelia pertusa reefs	R2010/08	All	All where they occur	2013, 2019 (1.b)	3/4	4/6	2/3	2/3	3/6
Maerl beds	R2014/13	All	III	2016, 2019 (1.b)			2/3		
Modiolus modiolus beds	R2013/03	All	All where they occur	2016, 2019 (1.b)	3/4	5/6	2/3	1/3	2/6
Oceanic ridges with hydrothermal vents/fields	R2014/11	I, V	V	2016, 2019 (1.b)					0/2
Ostrea edulis beds	R2013/04	II, III, IV	All where they occur	2016, 2019 (1.b)		8/8	2/3	2/3	
Sabellaria spinulosa reefs	R2013/02	All	II, III	2016, 2019 (1.b)		4/5	2/3		
Seamounts	R2014/09	I, IV, V	All where they occur	2016, 2019 (1.b)	2/4			2/3	2/6
Sea-pen and burrowing megafauna communities	R2010/11	I, II, III, IV	II, III	2013, 2019 (1.b)		6/7	2/3		
Zostera beds	R2012/04	I, II, III, IV	All where they occur	2013, 2019 (1.b)	2/4	6/7	2/3	2/3	

Reporting on the implementation of collective actions was carried out in 2019 (Table 3). The collective actions were reported on in accordance with the grouping of the actions in the Roadmap, i.e. as 46 collective actions. Two actions were reported as having been completed, namely action 41 ‘Enhance knowledge exchange between researchers, and between researchers, management authorities and OSPAR’ and action 36 ‘Establish collaboration with ICES WG Bird (ICES/OSPAR/HELCOM Joint Working Group on Birds) on data collection, storage and analysis’. Collective implementation is ongoing for 27 actions. This included 16 actions that seen as continuous activities and consequently which were not expected to be reported as completed in future implementation reporting cycles. Three different categories were used to distinguish types of actions where implementation is ongoing. For 19 collective actions implementation reporting noted that no implementation has yet taken place. Overall, it can be noted that implementation of collective actions has progressed significantly since the adoption of the implementation roadmap in 2016

**Table 3.** Overview of implementation reporting of the Roadmap for the implementation of collective actions within the Recommendations for the protection and conservation of OSPAR listed Species and Habitats

Symbol	Meaning	Number of collective actions
	<b>Not implemented</b>	<b>19</b>
	<b>In progress / partially complete</b>	<b>9</b>
	<b>Ongoing task</b>	<b>2</b>
	<b>Part of “POSH” cycle</b>	<b>14</b>
	<b>Implemented / Completed</b> <b>no further work required</b>	<b>2</b>

**Implementation reporting on measures on marine protected areas**

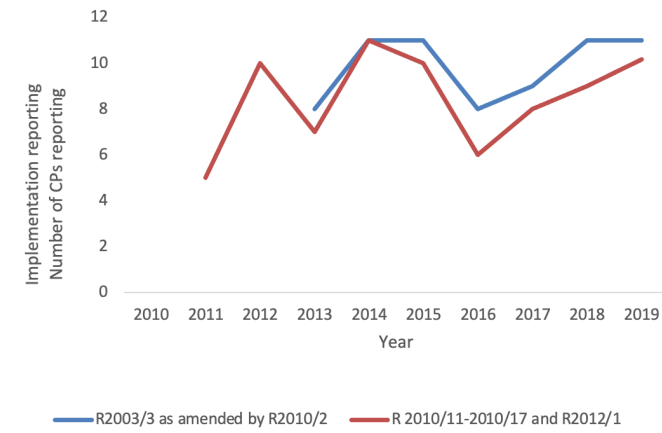
For MPAs an annual implementation reporting is required by 1 October each year on [Recommendations](#) 2003/3 and 2010/11-2010/17 and 2012/01. Contracting Parties are have committed to respond to the data call even in cases where there is no new information to report. The Biodiversity Committee reviews Contracting Parties’ implementation reporting annually. No overview assessment of implementation reporting has been developed, however the OSPAR Commission publishes a [status report](#) on the OSPAR MPAs on a biennial basis which describes progress with the MPA network. The most recent report was published in 2018, the next status report is scheduled for 2021 as a contribution towards the QSR 2023.

Twelve coastal Contracting Parties to OSPAR are required to submit annual implementation reports to OSPAR on Recommendation 2003/3 as amended by [2010/2](#) on the establishment of an OSPAR MPA network (Table 4). All Contracting Parties are recommended to provide implementation reports for the Recommendations 2010/11-2010/17 and Recommendation 2012/1 on the management of OSPAR MPAs collectively designated in the ABNJ. Contracting Parties should particularly submit an implementation report if there is no new information to report. Over past years, eleven Contracting Parties have provided at least one implementation report on these measures. Some Contracting Parties have not provided an implementation report every year (Figure 1).

**Table 4.** Performance on reporting on MPA measures 2010-2020. The row “network” shows the number of Contracting Parties reporting on selection of MPAs as components of the OSPAR network (Shown as a ratio of coastal Contracting Parties with waters in each Region who have reported. NB. A report that no MPAs are selected qualifies as a report). The row “MPAs in ABNJ” shows the number of Contracting Parties reporting on recommendations on the management of MPAs in ABNJ as a ratio of all Contracting parties.

Measure	Arctic Waters	Greater North Sea	Celtic Seas	Bay of Biscay and Iberian Coast	Wider Atlantic
Network	4/4	8/8	3/3	3/3	6/6
MPAs in ABNJ	NA	NA	NA	NA	11/16





**Figure 1.** Annual overall performance on reporting on MPA measures by Contracting Parties

Overview of implementation status of all measures under biodiversity and ecosystem strategy.

Recommendations on species and habitats

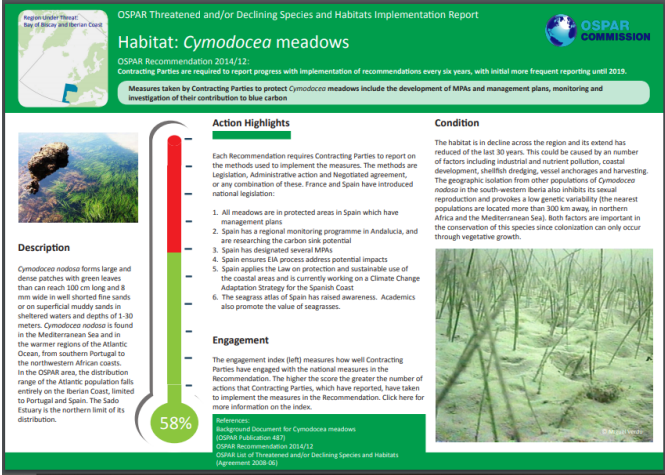
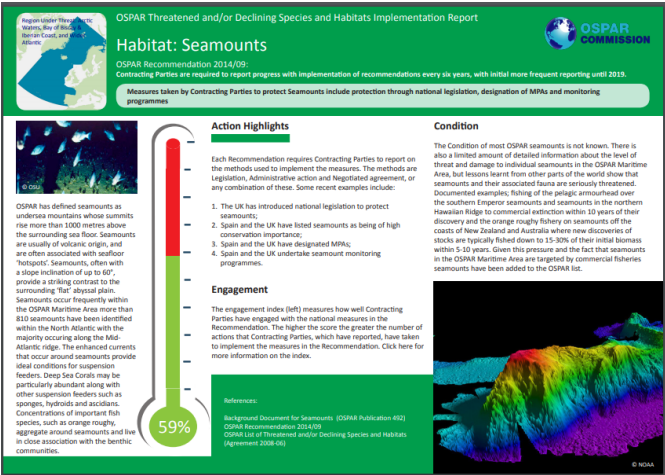
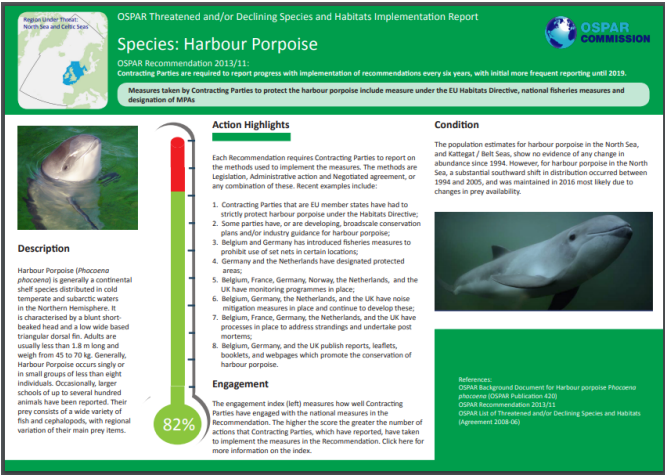
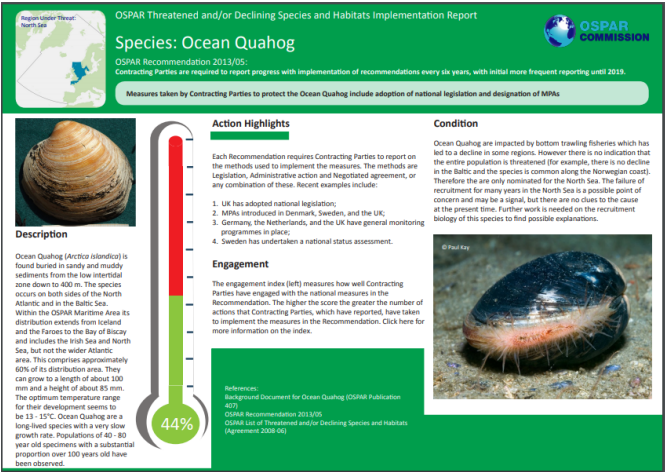
Development of an overview assessment of implementation reporting for threatened and/or declining species and habitats in 2013, 2016 and 2019 is ongoing. Implementation highlights were published online based on 2016 implementation reporting as a public outreach tool (Figure 2). The overall implementation status of all OSPAR Recommendations on species and habitats identified as priorities for action can currently be described as “in progress” (Schematic A). No Contracting Party has so far reported that they have fully implemented any of the Recommendations. In future this type of self-evaluation would benefit from being carried out at the level of the individual measures in each Recommendation that Contracting Parties are recommended to consider for the protection and conservation of the species or habitats concerned.

Schematic A. Implementation status of all 54 OSPAR Recommendations for protection and conservation of species and habitats



Based upon the implementation reporting to date an engagement index has been calculated for each feature, indicating the degree of implementation of the individual actions within a Recommendation by the concerned

Contracting Parties (Schematic B). This provides a more nuanced view on implementation status and shows that engagement on turtles, mammals and migratory fish is consistently high while engagement in protection and conservation of the bird species is more variable.



Schematic B: Engagement in the OSPAR Recommendations for protection and conservation of threatened and/or declining species and habitats The engagement index have not yet been calculated based on the 2019 reporting.

Schematic key:

	High engagement index >70
	Medium engagement index >35-70
	Measures for which an engagement index is not yet available

OSPAR Recommendations for protection and conservation of species and habitats

Invertebrates	Flat oyster	Ocean quahog	Azorean Limpet										
Marine birds	Iberian Guillemot	Steller's eider	Balearic shearwater	Black-legged kittiwake	Ivory gull	Lesser black-backed gull	Little shearwater	Roseate tern	Thick-billed murre				
Fish – migratory	Allis shad	Europe-an eel	Sturgeon	Sea lamprey	Salmon								
Fish	Leafscale gulper shark	Portuguese dogfish	Gulper shark	Spotted ray	Porbeagle	Thornback Ray	spurdog	Common skate	Angel shark	White Skate	Basking shark		
Fish – other	Cod	Long-snouted seahorse	Short-snouted seahorse										
Turtles	Leatherback Turtle	Loggerhead Turtle											



Mammals	Harbour Porpoise	Bow-head whale	Blue whale	North-ern right whale	
Habitats – coastal	Intertid-al Myti-lus edu-lis beds	Littoral chalk commu-nities	Cymo-docea mead-ows	Ostrea edu-lis beds	Intertid-al mud-flats
Habitats – shelf	Maerl Beds	Sabel-laria spinulo-sa reefs	Modiolus modio-lus beds	Lophelia pertu-sa reefs	
Habitats – deep sea	Car-bonate mounds	Oceanic ridges with hydro-thermal vents	Sea-mounds	Coral gardens	Deep-sea sponge aggre-gations
					Sea-pen & burrow-ing megafauna communities

Recommendations on the OSPAR network of Marine Protected Areas

Implementation of OSPAR Recommendation 2003/3 on the OSPAR Network of MPAs remains ongoing and Contracting Parties are recommended to report annually on new MPAs that are identified as components of the network. OSPAR Decisions on the establishment of MPAs in ABNJ have been implemented by the OSPAR Commission. Implementation of Recommendations on the management of Marine Protected Areas in ABNJ remains ongoing.

**Schematic C.** Implementation status of Decisions and Recommendations for the OSPAR Network of Marine Protected Areas.

Schematic key:

	Fully implemented
	In progress

Marine Protected Areas

Network of MPAs	R03/3						
	R10/2						
MPAs in ABNJ	D10/01	D10/2	D10/03	D10/04	D10/05	D10/06	D12/01
	R10/12	R10/13	R10/14	R10/15	R10/16	R10/17	R12/01

What have we achieved?

Species and habitats

Contracting Parties reporting on the Recommendations on species and habitats reporting has demonstrated that this new area of work within OSPAR has generated conservation action on the national level. Contracting Parties are making efforts to protect features that are threatened on a regional scale through various awareness raising activities, introducing national measures and legislation to regulate human activities causing pressures on the features establishing monitoring programmes to assess the status of the features.

Implementation reporting in 2013 and 2016 indicated that collective actions were not being implemented. The adoption of the [Roadmap for the implementation of collective actions within the Recommendations for the protection and conservation of OSPAR listed Species and Habitats](#) resulted in a concerted and more complete implementation reporting against these activities in 2019. The roadmap has also supported collaborative efforts across the thematic boundaries within OSPAR, for example, experts on underwater noise have been integrally involved in implementing actions to protect harbour porpoise. The status of biodiversity is a signal of the effectiveness of all OSPAR measures, not only the biodiversity conservation measures taken under the Biodiversity Committee.

This comparatively new area of work in OSPAR has now been well established and creates a solid foundation for prioritised national and collective actions to protect threatened and/or declining features going forward.

Marine Protected Areas

Since 2005, all 12 Contracting Parties bordering the North-East Atlantic have nominated sites to the OSPAR Network of MPAs in their national waters through the implementation of Recommendation 2003/3 as amended by [2010/2](#). Collective Implementation of the Recommendation has resulted in the establishment of OSPAR MPAs in ABNJ of the OSPAR Maritime Area. In 2020, the OSPAR Network of MPAs consists of 552 MPAs protecting a large number of threatened and/or declining species and habitats.

MPAs reported by Contracting Parties in national waters differ substantially regarding distribution of sites across coastal and offshore waters as well regarding overall coverage of their national waters by OSPAR MPAs as reflected in automatically generated key figures based on the [OSPAR MPA database](#). Annual implementation reporting requests Contracting Parties to maintain up to date information in the database which is regularly referred to by users outside of OSPAR, for example to review key statistics or to access information about the management plans of the MPAs and the protected features.

Contracting Parties have reported on specific actions taken to manage the ABNJ MPAs in response to the relevant Recommendations. These actions differ substantially. Some Contracting Parties have taken actions to inform other branches of government and national actors about the conservation objectives of the ABNJ MPAs, and requested that all stakeholders are informed if any planned activities would have a substantial effect on the features in the areas. Awareness raising activities have also been implemented through publication of articles nationally on the ABNJ MPAs for both a policymaking audience as well as the wider public. Considerable online information has also been created. The OSPAR ABNJ MPAs have been added to some national naval charts. Implementation reports have also included details of ships under the flag of a Contracting Party state passing through the ABNJ MPAs. Some Contracting Parties have informed that there is no fishing activity in the ABNJ MPA area by their national fleet.

Some Contracting Parties have reported an intention to continue to promote the concept of ambitious and effective high seas MPAs in the process of negotiating a binding instrument under the United Nations Convention on the Law of the Seas on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction (BBNJ). A commitment to further enlarge and develop work under the collective arrangement ([Agreement 2014-09](#)) has also been reported. Implementation reporting on the management of OSPAR MPAs in ABNJ can be further improved in the future by increased information sharing and a stronger focus on collaborative and coordinated action.

# Biodiversity and ecosystems strategy – environmental impact of human activities

## NEAES 2010-2020 Strategy Objectives

To halt and prevent by 2020 further loss of biodiversity in the OSPAR Maritime Area, to protect and conserve ecosystems, and to restore, where practicable, marine areas which have been adversely affected

To ensure integrated management of human activities in order to reduce impacts on the marine environment, taking into account the impacts of, and responses to, climate change and ocean acidification.

### What is the issue?

Demand for marine resources and space is increasing and there is a growing necessity to balance the needs of different sectors and conservation. Human activities, such as marine transport, fishing, mariculture, mineral extraction, marine renewable energy generation, tourism and recreation are the main forces driving this demand. These activities exert pressures on the marine environment, such as seabed disturbance, litter and noise with potential for adverse impacts.

Protection and conservation of the marine environment requires management of human activities to ensure that these pressures do not lead to adverse impacts. Effective implementation of integrated management, including marine spatial planning, aims to avoid or minimise negative effects on the marine environment and conflicts between different users.

### Where do we stand?

In its implementation of Annex V of the Convention OSPAR works to identify and assess human activities which may produce adverse impacts on the marine environment and its species, habitats and ecosystem processes and to prioritise those activities for which programmes and measures should be developed. OSPAR's most recent status assessments have focused on specific pressures and highlight that litter is abundant

on beaches and widespread on the seafloor where it is assessed in the OSPAR Maritime Area; trends in amounts and contamination of dredged material have remained steady; and that newly introduced non-indigenous species have been recorded at a relatively constant rate in areas where they are assessed.

### What have we committed to do?

Annex II of the OSPAR Convention prohibits dumping of all wastes or other matter in the marine environment. Authorisation or regulation of exceptions from this prohibition follows applicable criteria, guidelines and procedures adopted by the OSPAR Commission. For example, the OSPAR acquis includes OSPAR Recommendations and guidelines on disposal and dumping originally adopted under the Oslo Convention. One measure remains active setting out rules on the export of wastes for disposal at sea between Contracting Parties to the Convention as well as ruling out the export of wastes to states that are not party to the Convention other than in exceptional circumstances.

OSPAR has continued its work under Annex V of the Convention to consider human activities that may produce adverse impacts on the marine environment. Agreements have been adopted providing guidance on the management of a number of these activities such as cable laying, artificial reefs, sand and gravel extraction and disposal of dredged material (Table 5) This guidance is applied within the national marine planning and licensing systems of many Contracting Parties. OSPAR has also 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. This Recommendation requires Contracting Parties to give due attention to the OSPAR listed species and habitats when carrying out environmental impact assessments of new developments at sea and thus addresses amongst others the construction of structures at sea which may have consequences for hydrographical conditions and species and habitats. An [inventory of noise mitigation](#) techniques has also been developed to support steps to manage underwater noise within national licensing systems

As shipping is a key vector of invasive species and as a first step towards reducing the risk of introductions,

OSPAR worked with the [HELCOM](#) and [Barcelona Conventions](#) to put in place voluntary guidelines for the shipping industry that request vessels entering the waters concerned to exchange all their ballast tanks at least 200 nautical miles from the nearest land in water at least 200 metres deep. The General Guidance on the Voluntary Interim application of the D1 Ballast Water Exchange Standard entered into force on 1 October 2012. In preparation for the entry into force of the [IMO Ballast Water Management Convention](#), OSPAR also worked with HELCOM to adopt the [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 \(OSPAR Agreement 2020-01\)](#). This sets out a common risk assessment and monitoring approach for the granting of exemptions to vessels under the convention, with the aim of minimising the risk to the environment.

The Regional Action Plan (RAP-ML) for Prevention and Management of Marine Litter in the North-East Atlantic ([OSPAR Agreement: 2014-01](#)) sets out actions to be implemented by Contracting Parties individually and OSPAR actions to be taken collectively addressing: (1) sea-based sources of marine litter, (2) land-based sources of marine litter, (3) removal action, and (4) education and outreach. 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. OSPAR has also adopted specific Recommendations to promote the establishment of Fishing for Litter initiatives in fishing harbours of Contracting Parties. A Recommendation adopted in 2019 ([OSPAR Recommendation 2016/01](#)) aimed to reduce marine litter by promoting the implementation of training programmes for fishers addressing the social, economic and ecological impacts of marine litter.

Table 5. Summary of OSPAR measures for the management of human activities and their pressure

Activity or pressure	Recommendations	OSPAR Agreement
Disposal and/or dumping		
Execution of operations	<a href="#">OSCOM R86/1</a>	
Export of wastes for sea disposal	<a href="#">OSCOM R88/1</a>	
Fish waste		<a href="#">1998-21</a>
Dredged material		<a href="#">2014-06</a>
Conventional and chemical munitions		
Reporting on encounters	<a href="#">2003/02</a> , <a href="#">2010/20</a>	<a href="#">2004-09</a>
Sand and gravel extraction		<a href="#">2003-15</a>
Offshore wind farms		<a href="#">2008-03</a>
Cable laying and operation		<a href="#">2012-02</a>
Artificial reefs		<a href="#">2012-03</a>
Environmental Impact Assessment and OSPAR threatened and/or declining species and habitats	<a href="#">2010/5</a>	
Marine Litter		
- Fishing for litter	<a href="#">2016/01</a>	<a href="#">2017-08</a>
- Sustainability education for fishers	<a href="#">2019/01</a>	
- Regional Action Plan		<a href="#">2014-01</a>
Non-indigenous species		
- Ballast water management		<a href="#">2015-01</a>



Implementation reporting during the period 2010-2020

During the period 2010-2020 Contracting Parties have reported on the implementation of four OSPAR Recommendations on the environmental impact of human activities (Table 6). There is no formal reporting requirement for OSPAR Agreements.

**Table 6.** Performance on reporting of implementation of OSPAR Recommendations addressing the environmental impact of human activities (expressed as a ratio showing the number of Contracting Parties to which each measure is applicable in each OSPAR Region that have reported). Where Contracting Parties are required to report data when it is recorded (e.g. Recommendation 2010/20 on munitions encounters) a single report has been counted as an implementation report.

Measure	Arctic waters	Greater North Sea	Celtic Sea	Bay of Biscay and Iberian Coast	Wider Atlantic
R2010/5 – EIA on species and habitats	3/4	6/8	1/3	1/3	2/6
R2010/20 – Reporting on munitions encounters	2/4	7/8	2/3	2/3	3/6
R2010/19, R2016/01 – Fishing for litter	2/3	5/8	1/2	2/3	0/1

Implementation status

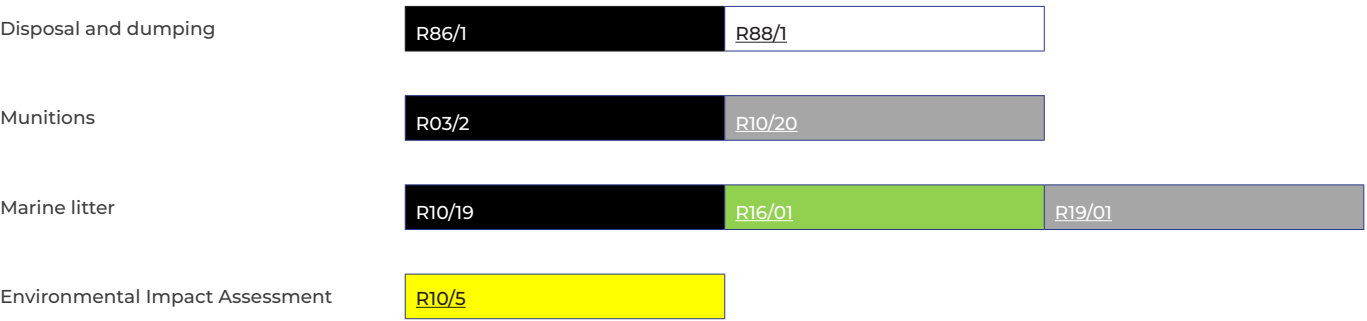
Based on this reporting the conclusions on implementation status of these OSPAR Recommendations can be drawn as at Schematic D.

**Schematic D.** Implementation status of OSPAR Recommendations addressing the environmental impact of human activities.

Schematic key:

	Fully implemented
	In progress
	Unknown
	Set aside (fully implemented or overtaken by other international measures) but still retained in OSPAR's acquis.
	No implementation reporting requirement. For some measures reporting in implementation takes places on an ad-hoc basis.

OSPAR Recommendations addressing environmental impacts of human activities



The implementation of the Regional Action Plan for Marine Litter ([OSPAR Agreement 2014-01](#)) has also been analysed on the basis of reports from Contracting Parties. Table 7 provides a synopsis of the state of play with implementation of the national actions in late 2019. Close to 70% of common actions were either in progress or fully implemented at this time.

Table 7. Synopsis of the state of play with implementation of the national actions in late 2019

Actions Ongoing or Complete	
% of Actions	Number of Contracting Parties (out of 15)
>50%	12
>75%	11
>85%	9
>90%	6

These include guidance on environmental considerations for offshore wind farm development, carbon capture and storage, cable-laying and management of dredged material at sea. Addressing the pressure from marine litter has been a key focus with the adoption of the Regional Action Plan being a major step towards a coordinated approach. It is now being implemented through collective and national actions, including OSPAR measures to address key issues, such as fishing for litter, sustainability training for fishers and the reduction of accidental losses of plastic pellets. OSPAR has laid the ground work for potential work on measures for underwater noise through developing an inventory of noise mitigation measures. OSPAR's work with the Helsinki (HELCOM) and Barcelona Conventions to prepare for the entry into force of the IMO Ballast Water Management Convention ensured that consistent environmental standards were put in place to reduce the impacts of shipping as a vector of non-indigenous species. Continued attention is needed to the management of human activities and their pressures including taking into account cumulative impacts from multiple pressures.

What have we achieved?

OSPAR has adopted Recommendations addressing specific issues with management of the impact of human activities such as on taking into account OSPAR listed species and habitats when conducting environmental impact assessments. OSPAR has also adopted several guidance documents, in the form of OSPAR "Other Agreements", on aspects of the management of human activities, which are used widely by Contracting Parties in national planning and licensing decision-making.

# Eutrophication strategy

## NEAES 2010-2020 Strategy Objective

To combat eutrophication in the OSPAR Maritime Area, with the ultimate aim to achieve and maintain a healthy marine environment where anthropogenic eutrophication does not occur.

### What is the issue?

OSPAR Contracting Parties have worked for over 30 years to reduce the inputs of nitrogen and phosphorus to these problem areas. It can take decades for such reduction measures to have positive effects in the sea because nutrients are released from soils and sediments.

### Where do we stand?

The results of the latest [eutrophication assessment](#) (for the period 2006–2014) indicate that eutrophication status of the OSPAR Maritime Area has improved, but eutrophication is still observed in 7% of the assessed area. Eutrophication occurs in areas sensitive to nutrient inputs, such as estuaries, fjords and bights, and in areas affected by river plumes. In particular, there is high eutrophication pressure on the south-eastern coast of the Greater North Sea and some localised coastal waters of the Celtic Seas and Bay of Biscay. This is despite the reduced input of nutrients and lower concentrations of nutrients observed in the marine environment.

Although the extent of eutrophication in the OSPAR Maritime Area has continued to decline since 1990, concerns about atmospheric and riverine inputs of nutrients identified in OSPAR's Quality Status Report 2010 still remain.

### What have we committed to do?

OSPAR adopted measures with regard to eutrophication in response to serious eutrophication effects in parts of the Maritime Area during the 1970s and 1980s. Agreement was reached on a target for reduction of nutrient inputs of the order of 50% between 1985 and 1995 ([PARCOM Recommendation 88/2](#)). Although good progress was made on reducing inputs of phosphorus, nitrogen inputs remained a problem and OSPAR Contracting Parties committed themselves to the 50% reduction target beyond 1995 as an integral part of its Eutrophication Strategy.

Regular national reporting, supported by harmonised procedures for quantifying and reporting discharges and losses of nutrients, helped OSPAR judge progress on reducing nutrient releases and achieving the 50% reduction target.

OSPAR Contracting Parties mainly work towards the reduction of nutrient inputs through implementing measures adopted in the EU, the European Economic Area and other international forums and the specific OSPAR measures on coordinated actions to reduce nutrient inputs were set aside in 2010. A wide range of European and international instruments aim at combating nutrient releases to surface waters and air through controlling discharges, emissions and losses at source and by setting environmental targets.

## Implementation reporting during the period 2010-2020

Implementing reporting on the one active OSPAR measure on the reduction of nutrient inputs ([PARCOM Recommendation 88/2](#)) was paused in 2008 pending the development of conclusions on the future reporting format. Therefore, there has been no dedicated implementation reporting during the last decade.

### Implementation status

**Schematic E.** Overviews of the status of OSPAR Recommendations addressing eutrophication (\* reporting on PARCOM Recommendation 88/2 on the reduction of inputs of nutrients is currently suspended).

#### Schematic key:

	Set aside (fully implemented or overtaken by other international measures) but still retained in OSPAR's acquis.
	No implementation reporting requirement. For some measures reporting in implementation takes places on an ad-hoc basis.

## OSPAR Recommendations addressing environmental impacts of human activities

Nutrient inputs - general	<div>R88/2*</div>	<div>R89/4</div>
Nutrient inputs - agriculture	<div>R92/7</div>	

### What have we achieved?

OSPAR measures and subsequent implementation of measures adopted in the EU, the European Economic Area and other international forums have had some effect in that eutrophication status in the OSPAR Maritime Area has improved. OSPAR's Comprehensive Atmospheric Monitoring Programme (CAMP) and the Riverine Inputs and Direct Discharges programme (RID) indicate that nutrient loads to the Greater North Sea have reduced. However, there is a lack of knowledge concerning which measures have been implemented and the effectiveness of specific measures remains unknown.

While several national initiatives for setting reduction targets have been completed, coordination to reduce nutrient inputs to the marine environment has been hindered by a lack of agreement between Contracting Parties and a lack of regionally consistent threshold values for eutrophication indicators. The OSPAR objective of “a healthy marine environment where anthropogenic eutrophication does not occur” will not be reached by 2020.

OSPAR is working towards acceptance of regionally-harmonised thresholds for the eutrophication common indicators and MSFD Commission Decision criteria and towards defining ecologically-relevant assessment areas.



# Hazardous substances strategy

## NEAES 2010-2020 Strategy Objective

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.

### What is the issue?

Many man-made and naturally occurring chemicals end up in the North-East Atlantic as a result of land-based and sea-based human activities. Some of these chemicals are hazardous for the marine environment.

OSPAR works to identify which substances are hazardous for the marine environment, to prevent, reduce and ultimately eliminate pollution with these substances, and to monitor the effectiveness of measures to achieve this.

### Where do we stand?

OSPAR countries have made significant efforts to reduce discharges, emissions, and losses of contaminants to both air and water. The effect of these efforts is clearly visible in reduced inputs to the Greater North Sea. OSPAR's [Intermediate Assessment 2017](#) showed that since the QSR 2010, contaminant concentrations have continued to decrease in the majority of areas assessed, especially for polychlorinated biphenyls (PCBs), which are industrial compounds with multiple industrial and commercial uses such as coolants and lubricants in electrical equipment. Although concentrations are generally below levels likely to harm marine species in the areas assessed, they mostly have not yet reduced to background levels (where these are specified). Concerns remain in some localised areas with respect to high levels of mercury, lead, and one of the most toxic PCBs. There are locally increasing concentrations of polycyclic aromatic hydrocarbons (PAHs), which are components of coal and oil, and cadmium in open waters.

Tributyltin used to be used in antifouling paint for ships' hulls and its harmful effects on marine snails have continued to decrease markedly due to global action taken to ban or restrict tributyltin use.



What have we committed to do?

OSPAR and its predecessor conventions adopted a series of measures concerning the prevention and elimination of discharges and emissions of hazardous substances from industrial installations. To help establish further priorities in OSPAR’s work, Contracting Parties agreed a List in 1998 on Chemicals for Priority Action ([OSPAR Agreement 2004-12](#)).

In 2010, OSPAR agreed that many of its measures addressing discharges, emissions and losses of hazardous substances should be classified as “set aside” recognising that they had been fulfilled or overtaken by measures adopted at national level or within other forums, such

as through the [EU Integrated Pollution Prevention and Control](#) (IPPC) Directive Best Available Techniques (BAT) reference documents (BREF) process. Therefore, they were no longer followed by OSPAR. While being set aside, they are retained as part of OSPAR’s ‘acquis’ and remain extant in order for their provisions to remain alive.

After 2010 the OSPAR ‘Acquis’ included the active (i.e. not set aside) measures under the Hazardous Substances Strategy that OSPAR continues to follow which are listed at Table 8.

Table 8. Active OSPAR measures under the OSPAR Hazardous Substances thematic strategy during 2010-2020.

Diffuse sources	Decision or Recommendation	Status of implementation
Short chained chlorinated paraffins – phase out	<a href="#">D95/1</a>	Fully implemented - Reporting ceased (OSPAR 2006)
Pesticides – agricultural and amenity use	<a href="#">R00/1</a>	Fully implemented (Set aside – 2019)
	<a href="#">R94/7</a>	? - Reporting ceased – 8 CPs (OSPAR 2006)
	<a href="#">R00/2</a>	Fully implemented - Reporting ceased (OSPAR 2003) (Set aside 2019)
Mercury – dentistry and crematoria	<a href="#">R93/2</a>	Fully implemented - Reporting ceased - 11 CPs (OSPAR 2002)
	<a href="#">R03/4</a> and <a href="#">R06/02</a>	Reported in 2011 and 2016. Next reporting 2026.
Organotins – docking activities	<a href="#">R88/1</a>	Fully implemented - Reporting ceased (OSPAR 2006)
Heavy metals – sewage sludge	<a href="#">R80/1</a>	No reporting requirement
Point sources		
Chlor-alkali plants – atmospheric emissions	<a href="#">D90/3</a>	Fully implemented - mercury losses from sector reported for 2010, 2011, 2012, 2013, 2014 and 2017
Aquaculture – potentially toxic chemicals	<a href="#">R94/6</a>	Reporting ceased (OSPAR 2006) - to be reviewed if significant developments occur in the sector
Inland ships – coal tar coating systems	<a href="#">R96/4</a>	Fully implemented – Reporting ceased (OSPAR 2006)
Discharges - oil terminals and reception facilities	<a href="#">R87/2</a>	Last reporting in 1989! Neither TWG/PRAM/HSC/HASEC or OIC has concluded on future implementation reporting on this measure

OSPAR Contracting Parties mainly work towards the reduction of inputs of hazardous substances to the marine environment through implementing measures adopted in the EU, the European Economic Area and other international forums. OSPAR keeps the progress, coherence and adequacy of the measures adopted by these bodies under review and communicates specific issues of relevance to the marine environment are identified.

To assess progress towards the objectives of the NEAES, OSPAR Contracting Parties routinely measure levels of contaminants in the OSPAR Maritime Area: heavy metals (mercury, cadmium, and lead), polycyclic aromatic hydrocarbons (PAHs), organotins and synthetic substances such as polychlorinated biphenyls (PCBs) and polybrominated diphenyl ethers (PBDEs). The selected contaminants are persistent, bioaccumulative and toxic, and will remain in the environment for many decades. Measurements focus on marine sediments and on organisms in which these contaminants tend to accumulate or through which they biomagnify up the food chain.

Implementation reporting during the period 2010-2020

Implementation of [OSPAR Recommendation 2003/4](#) on mercury from crematoria was reported in 2011 and 2016. Eighty percent of Contracting Parties who were required to report on this measure have reported in both rounds. Overall 93% of Contracting Parties have reported on their implementation of the Recommendations. Based on the information reported Contracting Parties have implemented Recommendation 2003/4, and the measures that have been put in place as a result of the Recommendation have significantly reduced the loads of mercury from crematoria entering the OSPAR Maritime Area. When the Recommendation was adopted, it was common that crematoria had no or limited abatement processes installed, whereas now there is a general recognition by Contracting Parties that where it is economically justified, abatement should be the norm. One Contracting Party reported that they did not implement the measure as their crematoria were so small that they did not consider it economically practicable. The measure allows for such situations.

Implementation status

The implementation status of OSPAR’s hazardous substances measures is shown in Schematic F.

**Schematic F.** Overview of implementation status of all hazardous substances measures under the ‘OSPAR acquis’.

Schematic key:

	Fully implemented
	In progress
	Unknown
	Set aside (fully implemented or overtaken by other international measures) but still retained in OSPAR's acquis.
	No implementation reporting requirement. For some measures reporting in implementation takes places on an ad-hoc basis.



OSPAR Decisions and Recommendations addressing hazardous substances

Point sources from industrial sectors

Iron and steel	R90/1	R91/2	R91/3	R92/1	R92/2	R92/3	R93/1		
Non-ferrous metals	D96/1	R92/1A	R02/1A	R92/4	R96/1	R98/1	R98/1	R98/2	R84/1
Surface treatment of metals	R94/1								
Chlor-alkali	D80/2	D81/1	D81/2	R85/1	D90/3				
Textile	R94/5	R97/1							
Pharmaceuticals	R92/5								
Organic chemicals	R94/4								
Large combustion plants	R97/2								
Vinyl chloride monomer	D98/4	D98/5	R00/3	R00/3	R06/1	R96/2	R96/3	R99/1	
Pulp and paper	D92/1	D95/2	D95/3	D96/2	R94/2	R94/3			
Refineries	R89/5								
Oil facilities	R81/2	R83/1	R87/2	R89/5					
Aquaculture	R94/6								

Diffuse sources

Cadmium	D85/2	D90/2					
Mercury & Hg compounds	D80/1	R81/1	R82/1	R89/3	R93/2	R03/4	
Metals – sewage sludge	R80/1						
Organic tin compounds	R88/1						
Organic esters	R92/8						
Organohalogens	D92/3	D95/1					
PAHs	R96/4						
Pesticides	R94/7	R00/1	R00/2				
Cationic detergents	R93/4						

What have we achieved?

Since 2010 OSPAR Contracting Parties have continued to progress implementation of the remaining active measures on hazardous substances and report information on implementation and data on discharges, emissions and losses. The 2019 round of data reporting on discharges, emissions and losses of mercury by all routes from mercury-cell chlor-alkali plants operating within the OSPAR Maritime Area revealed that chlor-alkali plants in the OSPAR Maritime Area no longer use mercury technology for the production of chlor-alkali. This means that [PARCOM Decision 90/3](#) on reducing atmospheric emissions from existing chlor-alkali plants has achieved its aims and discharges, emissions and losses of mercury from these sources have ceased altogether. Continued reporting has also shown that measures to control mercury emissions from crematoria which have been put in place have significantly reduced the loads of mercury from crematoria entering the OSPAR Maritime Area.

A parallel focus of OSPAR's efforts on hazardous substances has been to keep a watch on the regulating activities of other authorities (especially the European Union). OSPAR Contracting Parties have moved towards the objective of cessation of discharges, emissions and losses of hazardous substances, particularly through

European legislation on marketing and use of chemicals on the OSPAR list of chemicals for priority actions and the OSPAR list of substances of possible concern also the [Industrial Emission Directive](#) and [Urban Waste Water Treatment Directive](#) and implementation of the [Stockholm](#) and [Minimata](#) Conventions.

OSPAR monitoring shows the objective of achieving 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 has not yet been reached. However, the concentrations of contaminants assessed have continued to decrease in the majority of areas assessed and are generally below levels likely to harm marine species in the areas assessed. OSPAR's [Intermediate Assessment 2017](#) shows decreases in heavy metal loads via air and water to the Greater North Sea.

OSPAR is working to refocus its work with the OSPAR substance lists to focus on substances that are considered to be of concern to the marine environment, including substances covered within the EU framework and global conventions, but also screening for emerging substances that may require a rapid response to protect the marine environment.





# Offshore oil and gas industry strategy

## NEAES 2010-2020 Strategy Objective

To prevent and eliminate pollution and take the necessary measures to protect the OSPAR Maritime Area against the adverse effects of offshore activities.

### What is the issue?

Environmental impacts from offshore oil and gas activities occur throughout the lifecycle of these activities, including during the exploration, production and decommissioning phases. The transportation of oil and gas by pipeline or tanker has the potential to cause impacts outside the area of production.

OSPAR works under the Offshore Oil and Gas Industry Strategy to establish environmental goals and improve management mechanisms so as to prevent pollution and protect the marine environment, consistent with the objectives set by OSPAR, including those for hazardous substances. The Offshore Oil and Gas Industry Strategy also covers activities to store CO2 streams in geological formations.

### Where do we stand?

OSPAR has developed programmes and measures in respect of all phases of offshore oil and gas activities and undertakes annual assessments of discharges, spills and emissions data from offshore oil and gas installations.

Assessment of the data for the period 2009–2014 shows a decrease in the discharge of both hydrocarbons and the most hazardous offshore chemicals that are routinely discharged to the marine environment during offshore oil and gas operations. This is a continuation of the trend reported in the last OSPAR Quality Status Report (QSR 2010). Many of the downward trends observed can be directly attributed to measures adopted by OSPAR and their subsequent implementation by the offshore oil and gas industry.

### What have we committed to do?

**Table 9:** Measures adopted under OSPAR Offshore Oil and Gas Industry strategy

Activity or Pressure	OSPAR Decision or Recommendation
Drilling and cuttings piles <ul style="list-style-type: none"><li>Use of Organic-phase Drilling Fluids (OPF) and the Discharge of OPF-Contaminated Cuttings</li><li>Management regime</li></ul>	<a href="#">D2000/3*</a> <a href="#">R2006/5*</a>
Use and discharge of chemicals <ul style="list-style-type: none"><li>a harmonised pre-screening scheme</li><li>harmonised mandatory control system</li><li>a harmonised Offshore Chemical Notification Format</li><li>environmental goals for chemicals that Are, or Which Contain Substances Identified as Candidates for Substitution</li><li>discharge of chemicals that are , or contain substances, listed in the OSPAR List of chemicals for priority action</li></ul>	<a href="#">R2019/4</a> <a href="#">D2005/1*</a> , <a href="#">D2000/2*</a> <a href="#">R2019/3*</a> <a href="#">R2006/3</a>  <a href="#">R2005/2*</a>
Discharge of produced water	<a href="#">R2001/1</a> and <a href="#">R2012/5</a>
Disposal of Disused Offshore Installations	<a href="#">D98/3</a>
Other waste from production <ul style="list-style-type: none"><li>Emissions standard for platforms (Ballast water, drainage water and displacement water)</li><li>Disposal of Pipes, Metal Shavings and Other Material Resulting</li></ul>	<a href="#">R86/1</a> (PARCOM)  <a href="#">R77/1</a> (OSCOM) – set aside
Environmental Management Systems by the Offshore Industry	<a href="#">R2003/5</a>
Storage of Carbon Dioxide Streams	<a href="#">D2007/1</a> , <a href="#">D2007/2</a>
Prevention of significant acute oil pollution	<a href="#">R2010/18</a>

\*Already assessed as fully implemented in 2010

## Implementation reporting during the period 2010-2020

During 2010-2020 implementation reporting has focused on the following issues:

- 2010 , 2013, 2018 - Management of Produced Water Discharges ([OSPAR Recommendation 2001/1](#))
- 2011 - Environmental Goals for the Discharge by the Offshore Industry of Chemicals that Are, or Contain Added Substances, Listed in the OSPAR 2004 List of Chemicals for Priority Action ([OSPAR Recommendation 2005/2](#))
- 2013, 2017 - Environmental Goals for the Discharge by the Offshore Industry of Chemicals that Are, or Which Contain Substances Identified as Candidates for Substitution ([OSPAR Recommendation 2006/3](#))
- 2012- Environmental Management Systems by the Offshore Industry ([OSPAR Recommendation 2003/5](#))
- 2013, 2018 – Review of [OSPAR Decision 1998/3](#) on the disposal of disused offshore installations

Table 10 summarises Contracting Parties performance with implementation reporting of these measures.

**Table 10.** Performance with reporting on implementation of measures for the offshore industry (number of applicable Contracting Parties reporting)

Measure	Arctic waters	Greater North Sea	Celtic Sea	Bay of Biscay and Iberian Coast	Wider Atlantic
2006/3	2/2	5/5	2/2	NA	NA
2003/5	2/2	5/5	2/2	1/1	NA
2005/2	2/2	5/5	2/2	NA	NA
2001/1	2/2	5/5	2/2	NA	NA

### Overview of implementation status

On the basis of Contracting Parties reports on the implementation of these measures OSPAR has drawn the overall conclusions on the measures that have been reported on (see Table 11). Contracting Parties have also been requested to provide their own conclusions on the state of implementation of the measures (see Table 12). Even though the provisions of a measure have been fully implemented by Contracting Parties the full intention of the measures may not have been fully realised.

**Table 11.** Overall conclusions on the Implementation status of measures that have been reported on

Measure	Arctic waters	Greater North Sea	Celtic Sea	Bay of Biscay and Iberian Coast	Wider Atlantic
2006/3					NA
2003/5					NA
2005/2				NA	NA
2001/1				NA	NA

Table 12. Number of Contracting Parties which have reported full implementation

Measure	Arctic waters	Greater North Sea	Celtic Sea	Bay of Biscay and Iberian Coast	Wider Atlantic
2006/3	1/1	5/5	2/2		
2003/5	1/1	5/5	2/2	1/1	
2005/2	1/1	5/5	2/2	NA	
2001/1	1/1	5/5	2/2	NA	
All	100%	100%	100%		

Schematic G. Overview of implementation status of all measures regarding offshore oil and gas industry

Schematic Key:

	Fully implemented
	In progress
	Unknown
	Set aside (fully implemented or overtaken by other international measures) but still retained in OSPAR's acquis.
	No implementation reporting requirement. For some measures reporting in implementation takes places on an ad-hoc basis.

OSPAR Decisions and Recommendations under the Offshore Oil and Gas Industry Strategy

Drilling and cuttings piles	D00/3	R06/5				
Chemicals - use and discharge	D00/2	R05/1	R05/2	R06/3	R14/17	R17/1
Produced water - discharge	R01/1	R12/5				
Installations - disposal	D98/3					
Other wastes	R77/1	R86/1				
Environmental management systems	R03/5					
Carbon dioxide – storage	D07/1	D07/2				
Significant acute pollution	R10/18					

What have we achieved?

The adoption, updating and implementation of harmonised measures under the OSPAR offshore oil and gas industry strategy has achieved a reduction of over 20% in the amount of dispersed oil discharged in produced water; the phase out of discharges of offshore chemicals on OSPAR's List of Chemicals for Priority Action ([OSPAR Agreement 2004-12](#)); and a nearly 50% reduction in the discharge of chemical substances identified as candidates for substitution (although further reductions in discharges are considered possible). A risk-based approach for the management of produced water discharges has also been introduced to complement the OSPAR harmonised mandatory control system for offshore chemicals and promote the shift towards a reduction in the use of more hazardous substances. Contracting Parties have also fully implemented the ban on the dumping or leaving in place of disused offshore installations. Since the adoption of [Decision 98/3](#), approximately 170 installations have been decommissioned of which 10 were granted derogations.



Radioactive substances strategy

NEAES 2010-2020 Radioactive Substances Strategy Objective

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.

What is the issue?

Radioactive materials are an essential part of everyday life and have many applications, such as the generation of electricity and diagnostic and therapeutic uses in medicine. Exposure to natural background radiation results from naturally occurring radioactive materials in the ground, the air, food and cosmic rays from outer space. For most individuals, exposure to natural background radiation is the largest component of their total radiation exposure.

Use of radioactive materials and the disposal and discharge of radioactive waste is subject to stringent internationally agreed regulation. During the course of their use, quantities of radioactive substances may be discharged into the environment, subject to regulatory authorisation, from nuclear installations such as nuclear power stations, and from non-nuclear installations such as hospitals and oil and gas installations. These discharges can lead to additional radiation exposure for humans and other organisms.

Where do we stand?

Since the mid-1980s, liquid discharges of radioactive substances from nuclear installations have been addressed first under the former Paris Convention and then under the OSPAR Convention. OSPAR Contracting Parties have achieved substantial reductions in discharges from the nuclear sector in many cases and are continuing to make good progress in meeting the objectives of the OSPAR Radioactive Substances Strategy.



OSPAR has also addressed the disposal of nuclear waste. OSPAR Convention (Article 3.3(a) of Annex II) prohibits the dumping of low and intermediate level radioactive substances, including waste. In addition, [PARCOM Recommendation 91/5](#) addresses the Disposal of Radioactive Wastes into Sub-Seabed Repositories Accessed from land.

What have we committed to do?

OSPAR's active measures under the Radioactive Substances Strategy address the continued reduction of discharges from all nuclear industries, including

research reactors and reprocessing plants, into the marine environment (Table 13). All measures are considered fully implemented. One measure adopted in 2018 to update an earlier measure is to be implemented after the 2010-2020 period as Contracting Parties are requested to report after December 2019 on the implementation of this measure. OSPAR continues to maintain a watching brief on the progress with the reduction of discharges of radionuclides from nuclear installations through annual data reporting.

Table 13. OSPAR measures under the Radioactive substances thematic strategy

Pressure	Decision, Recommendation or Agreement
Discharges from nuclear industry	R91/4, R94/8, R18/1*, A05/08, A13/10
Discharges from the non-nuclear sector	A13/11
Discharges from nuclear reprocessing	R88/4, D00/01, D01/01, R93/5
Nuclear waste disposal	R91/5, D98/2
Spent nuclear fuel management	R94/9

\*OSPAR Recommendation 2018/1 supersedes PARCOM Recommendation 1991/4

Implementation reporting during the period 2010-2020

During the period 2010-2020 the main focus of formal implementation reporting was [PARCOM Recommendation 91/4](#) on radioactive discharges. This measure is considered fully implemented and continued reporting on implementation has the purpose to allow OSPAR to keep a watching brief on how Contracting Parties respect the relevant Recommendations of the competent international organisations and apply the Best Available Technology to minimise and, as appropriate, eliminate any pollution caused by radioactive discharges. All relevant Contracting Parties apart from one have continued to report on their implementation of this measure (90% reporting rate).

Data on environmental concentrations of radionuclides and discharges from the nuclear and non-nuclear sector are reported to OSPAR through coordinated programmes defined by OSPAR Agreements [2005-08](#) (2018 update),

[2013-10](#) (2019 update) and [2013-11](#), respectively. These agreements are considered to be fully implemented by the relevant Contracting Parties through annual data reporting and in the case of discharge data through the publication of annual assessment reports.

Implementation status

**Schematic H.** Overview of implementation status of all measures under radioactive substances strategy

Schematic Key:

	Fully implemented
	In progress
	Set aside (fully implemented or overtaken by other international measures) but still retained in OSPAR's acquis.
	No implementation reporting requirement. For some measures reporting in implementation takes places on an ad-hoc basis.

OSPAR Decisions and Recommendations under the Radioactive Substances Strategy

Discharges:

Nuclear industries	R91/4	R94/8	R18/1	A05/8	A13/10
Non-nuclear sector	A13/11				
Nuclear reprocessing	R88/4	D00/1	D01/1	R93/5	
Nuclear waste	R91/5	D98/2			
Spent nuclear fuel	R94/9				

What have we achieved?

OSPAR Contracting Parties have achieved substantial reductions and continue to make good progress towards the OSPAR objectives for the reduction of discharges from the nuclear sector (fuel reprocessing plants, nuclear power plants, research and development facilities, and nuclear fuel production and enrichment). These reductions are, in part, due to the thorough, and continuous, application of BAT as required under PARCOM 91/4 (the application of Best Available Techniques). Under PARCOM 91/4, Contracting Parties submit their current reports/ procedures on Best Available Techniques for peer review by RSC on a periodic basis.

In terms of the overall progress against OSPAR objectives, there has been a 2.5 fold reduction in discharges of total alpha since the baseline period (1995-2001) and a 12-fold reduction in discharges of total beta (excluding tritium) since the baseline period. Another significant success is a 38-fold decrease in discharges of the long-lived radioactive element, technetium. The radiological impacts on man and biota from the remaining discharges are low.

[The Fifth Periodic Evaluation](#) showed that for 35 out of 53 (66%) of the assessments of indicators across 4 different nuclear sub-sectors for individual CPs, there is evidence of substantial reductions in radioactive discharges since the baseline period (1995–2001). None of the assessments showed evidence of an increase in discharges.

OSPAR has agreed a methodology for the use and derivation of Environmental Assessment Criteria for radionuclides ([OSPAR Agreement 2016-07](#)) for the assessment of the radiological risk of environmental concentrations of radionuclides.

Annex 1: Developing a consistent framework across the OSPAR strategies for summarising overall conclusions on the implementation of measures through the MAP matrix (Extract from CoG(2) 18/2/4)

Developing the MAP Matrix

This Annex describes how the MAP matrix tool is being developed to support the OSPAR Commission’s work of reviewing the implementation of OSPAR measure. These developments aim to make available accessible consistent and synthesised information on progress with implementation of each OSPAR measure and action. They also aim to provide a clear overall structure for conclusions on the implementation of measures which can guide the Committee level work of evaluating the implementation of individual OSPAR measures and actions.

The addition of the following information on implementation has been as the basis for this progress report on the implementation of OSPAR measures as part of the review of progress under the NEAES 2010-2020.

Factual information on the implementation of the measure

- a. Years when implementation reporting and evaluation has taken place. For Decisions and Recommendations that have not yet been fully implemented the years (meeting cycles) between 2010 and 2020 when all rounds of implementation took place should be listed. For Decisions and Recommendations that were set aside in 2010 (and already considered fully implemented at that time), it is only necessary to state the last year (meeting cycle) when implementation reporting and review took place.
- b. Contracting Parties with a reservation on the Decision or Recommendation
- c. The number of Contracting Parties to whom the Decision or Recommendation is applicable in each OSPAR Region. Especially relevant for biodiversity measures

Information/conclusion on implementation (reporting)

- d. The number of Contracting Parties that have reported on implementation in each OSPAR Region;
- e. OSPAR’s overall conclusions on the state of play with implementation in each OSPAR Region and across the OSPAR Convention area;

Overall conclusions on the implementation of measures at the scale of OSPAR Regions and the OSPAR Convention area. These conclusions should build on self-evaluations by Contracting Parties on their state of progress with each measure. For comparable progress evaluations, a consistent and categorical classification of the implementation status is needed. The following four categories draw on previous OSPAR measure evaluations and experiences and seek to take into account other policy classification systems (e.g. under Art. 18 MSFD reporting) to allow Contracting Parties who wish to do so to re-use OSPAR overall conclusions in these other contexts. The four categories should be used for national self-evaluation of progress on the implementation of OSPAR measures and action, including in future implementation reporting under the OSPAR Convention, and for OSPAR overall conclusions on the implementation status.

Fully implemented	<p>All components of the measure are implemented in space and time as planned. Measures comprising components of a continuous or repetitive nature are considered fully implemented when the first action in the series has been completed.</p> <p>Examples: legal or economic instruments have entered into force and are applicable; technical requirements (e.g. BAT/BEP) are fully operational with the planned spatial and temporal coverage of the measure; all or one in a series of planned policy actions (e.g. awareness raising) are in operation.</p>
Not yet (fully) implemented	<p>One or more planned components of the measure have been started but not yet completed. Implementation has started when it has passed the preparatory stage and has materialised in actions which allow the expectation of successful completion of the measure’s implementation. Criteria for this stage are that financing of the measure is secured (measure is budgeted) and that affirmative action (e.g. draft legal or economic instruments are submitted to formal decision-making processes, technical work has started or all administrative procedures are completed to allow technical work to start) can be demonstrated.</p>
Implementation has not yet occurred	<p>Measure implementation has not yet started as defined under „not yet (fully) implemented“. The measure is still in the planning and preparatory phase.</p>
Unknown	<p>This category refers to situations of lack of information in order to class progress or situations where no report has been received by a Contracting Party.</p>

The implementation categories are coarse and do not provide a qualitative indication whether work to implement a measure or component thereof is underway and to which extent complex measures with many components are progressing. TG-MAP proposes to use the coarse system in the short term, e.g. in support of the review of NEAES 2010-2020) but to develop a more differentiated MAP-Matrix in the longer term which strives for reviewing progress based on the four categories at component level of each measure and for including brief progress descriptions of measure implementation.

Acceptance	Further work needed to underpin acceptance of the measure, e.g. by certain stakeholders.
Financing	Finance needs to be secured
Mechanism for implementation - national	There is a need to put in place a mechanism for the implementation at the national level, e.g. the necessary regulation or other mechanism required for implementing the measure has not yet been adopted or developed
Mechanism for implementation - regional	There is a need to put in place a mechanism for the implementation in another Regional Sea Convention, regional organisation or through bilateral arrangements, e.g. the necessary regulation or other mechanism required for implementing the measure has not yet been adopted or developed
Mechanism for implementation – EU level	There is a need to put in place a mechanism for the implementation at the EU level, e.g. the necessary regulation or other mechanism required for implementing the measure has not yet been adopted
Mechanism for implementation - International	There is a need to put in place a mechanism for the implementation at the international level, e.g. the necessary regulation or other mechanism required for implementing the measure has not yet been adopted
Technical implementation	There is a need to address technical difficulties which prevent a measure from being implemented
Cost effectiveness	There is new information on cost-effectiveness, i.e. either the measure is found not to be as effective as planned or the planned effect can only be achieved with higher costs
Data or information	Data or information need to be collected and evaluated to inform the implementation of the measure
Other	Any other reasons.

- g. Number of Contracting Parties in each OSPAR Region that have reported they have fully implemented the measure have reported they are at other stages of implementation;

This will provide information of the progress towards full implementation and other stages of implementation of a measure in each OSPAR Region recognising that Contracting Parties may progress at different speeds along the pathway towards full implementation of a measure. Generation of this information requires a national self-evaluation according to point e) which is already a part of many of OSPAR implementation reporting processes. Requesting this information for population of the MAP matrix can help to bring about consistency across all OSPAR implementation reporting. The categorisation proposed at e) should be used.

- f. Issues that need to be addressed to complete implementation in each OSPAR Region

The evaluation of progress towards full implementation at OSPAR level can be informed by an understanding of the types of issues (or barriers) that need to be addressed. The following categorisation is proposed. These issues will also be relevant for use in a national self-evaluation of implementation.

- h. Links to the published overview assessments of implementation of OSPAR measures

OSPAR Committees regularly review implementation of OSPAR measures and recommend to the OSPAR Commission the publication of overview assessments on the OSPAR website. Links to these are recommended to be included in the MAP matrix, for example, through a link in an additional column. This allows for transparency and drilling into more detail-level information on measures implementation. Before its 2015 redesign, the OSPAR website included a tool with functionality to link between the listing of an OSPAR measure and the published overview assessment of implementation reporting (as well as the measure and the implementation reporting format). The recommended step would restore this functionality which seems to have been removed without any specific discussion.



**Addition of Other Agreements to the MAP**

Including OSPAR other agreements in the MAP matrix could also provide a fuller reflection of OSPAR work on actions and measures to meet OSPAR strategic objectives. Some OSPAR other agreements are closely linked to the purpose of fulfilling the OSPAR strategic objectives and have direct effect on the management of human activities, even though they have not been adopted at the status of Decisions or Recommendations (e.g. Regional Action Plan (RAP) on marine litter or Agreement on Ballast water exchange). It is suggested to develop the MAP matrix to include such other OSPAR agreements. To inform how this should be done TG-MAP has applied the categorisation for mode of action that used already in the MAP matrix to the list of OSPAR other agreements. A proposed allocation of OSPAR other agreements according to this categorisation is provided as an addendum to this document (CoG(2) 18/2/4 Add.2). CoG may wish to decide that OSPAR other agreements with a mode of action that directly reduces or mitigates pressures should be included in the extension of the MAP matrix to support the NEAES 2010-2020 progress review. When considering the above requirements for information on implementation, it should be noted that there is generally no formal implementation reporting for OSPAR other agreements. This means additional effort for Committees to recruit this type of information for other agreements. It is up to CoG and Committees to decide whether including other agreements is feasible in the short term as contribution to the review of NEAES 2010-2020 or whether this should be an issue for the longer-term MAP-development.





OSPAR Secretariat  
The Aspect  
12 Finsbury Square  
London  
EC2A 1AS  
United Kingdom

+44 (0) 20 7430 5200

Secretariat@ospar.org

[www.ospar.org](http://www.ospar.org)

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