



## Priorities for MSFD programmes of measures

Joint NGO paper – updated with additional chapters, October 2014

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# Contents

<b>1</b>	<b>Introduction</b>	<b>4</b>
1.1	MSFD programmes of measures – state of play	4
1.2	Objectives of this paper	5
<b>2</b>	<b>Priorities for Descriptor 2 – Non-indigenous species</b>	<b>6</b>
2.1	Background	6
2.2	Targets proposed by NGOs	7
2.3	Measures proposed by NGOs	7
<b>3</b>	<b>Priorities for Descriptor 3 – Commercial fish and shellfish</b>	<b>10</b>
3.1	Background	10
3.2	Targets proposed by NGOs	11
3.3	Measures proposed by NGOs	12
<b>4</b>	<b>Priorities for Descriptors 1, 4 and 6 – Biodiversity</b>	<b>13</b>
4.1	Background	13
4.2	Measures proposed by NGOs: establishing a network of well managed MPAs	14
<b>5</b>	<b>Priorities for Descriptor 5 – Eutrophication</b>	<b>20</b>
5.1	Background	20
5.2	Targets proposed by NGOs	21
5.3	Measures proposed by NGOs	21
<b>6</b>	<b>Priorities for Descriptors 8 and 9 – Contaminants</b>	<b>23</b>
6.1	Background	23
6.2	Targets proposed by NGOs	23
6.3	Measures proposed by NGOs	24
<b>7</b>	<b>Priorities for Descriptor 10 – Marine litter</b>	<b>26</b>
7.1	Background	26
7.2	Targets proposed by NGOs	27
7.3	Measures proposed by NGOs	27
<b>8</b>	<b>Descriptor 11 – Underwater noise</b>	<b>28</b>
8.1	Background	28
8.2	Targets proposed by NGOs	29
8.3	Measures proposed by NGOs	30
<b>9</b>	<b>Priorities for public participation and consultation</b>	<b>32</b>
9.1	MSFD requirements for public participation and consultation	32
9.2	Measures proposed at national level	33
9.3	Measures proposed at EU and regional seas level	35
	<b>Contacts</b>	<b>38</b>

# 1 Introduction

The Marine Strategy Framework Directive (MSFD) has entered a crucial implementation phase as countries are now developing their programmes of measures (PoMs), which are to achieve or maintain Good Environmental Status (GES) in marine waters by 2020. Early and effective public participation and consultation in the development of these PoMs is a prerequisite for their success.

This paper aims to facilitate this process and to support NGOs and national authorities in their work with developing measures. It includes the priority measures and targets NGOs would like to see implemented for a selection of the MSFD descriptors, i.e. commercial fish and shellfish, biodiversity, eutrophication, contaminants and marine litter, as well as recommendations for the establishment of an ecologically coherent network of well-managed marine protected areas. It also provides good practice guidance for organising effective public participation and consultation. The paper is the result of a collaboration of a wide network of international and national NGOs.

## 1.1 MSFD programmes of measures – state of play

The MSFD is the first all-encompassing piece of European legislation specifically aimed at the protection of the marine environment. Its ultimate objective is to achieve a GES in all European waters by 2020 at the latest.

The Directive foresees the implementation of an ecosystem-based approach to the management of activities having an impact on the marine environment. The key deliverable stemming from the implementation of the Directive will be a range of “Marine Strategies” which every EU Member State must produce. These have to be developed in three steps:

- In 2012, the countries had to report on the environmental status of their marine waters, descriptions of what Good Environmental Status means for their marine waters and an associated set of environmental targets and indicators.
- 2014 will see the adoption of national monitoring programmes (ongoing).
- By 2015 at the latest, the countries have to develop programmes of measures designed to achieve or maintain GES. The PoMs should entry into operation by 2016.

The implementation of the Directive so far shows many weaknesses. In February 2014, the Commission published its review of the 2012 reports by Member States, as required by Article 12 of the MSFD. The ‘Article 12 report’ stated that “The EU is still very far from enjoying healthy oceans and seas. Meeting this objective by 2020, in less than seven years, implies renewed and intensified efforts and rapid and important change in the way Member States, the European Commission, Regional Seas Conventions and other relevant organisations work together”<sup>1</sup>.

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<sup>1</sup> The European Commission's assessment and guidance {SWD(2014) 49 final}: The first phase of implementation of the Marine Strategy Framework Directive (2008/56/EC). Report from the Commission to the Council and the European Parliament. [http://ec.europa.eu/environment/marine/eu-coast-and-marine-policy/implementation/reports\\_en.htm](http://ec.europa.eu/environment/marine/eu-coast-and-marine-policy/implementation/reports_en.htm)

The Commission requested the countries to integrate its 'Article 12' recommendations (among others related to strengthening targets and coordination) in the monitoring programmes and the PoMs, and not to postpone such improvements till the next cycle of the MSFD in 2018.

Most countries have already started to develop their PoMs and will submit these to public consultation in 2014 or begin 2015.

## 1.2 Objectives of this paper

Article 19 of the directive requires that each Member State organises a public consultation procedure related to each implementation step of the implementation of the MSFD. Member States have to ensure that all interested parties are given early and effective opportunities to participate, involving where possible, existing management bodies or structures.

This paper is intended to facilitate this process, i.e. aims to support national authorities in their work with developing measures and to support NGOs in their MSFD participation in the consultation and to help them to build the effectiveness of their lobbying efforts towards each Member State.

In order to do so, this paper lines out:

- The priority measures NGOs would like to see implemented for a selection of the MSFD Descriptors and the targets they would like to see adopted (in order to help ensure that targets are strengthened, in line with the recommendations of the Article 12 review).
- Recommendations for the establishment of an ecologically coherent and well managed network of marine protected areas, which is one of the key requirements of the MSFD.
- Recommendations for conducting public participation and consultation, as NGOs have experienced a number of weaknesses in those processes till date.<sup>2</sup>

The measures and targets proposed in this paper are intended for guidance and use across the EU, and may need to be tailored to the national contexts, i.e. taking account of already existing measures and of the degree of importance of each descriptor (e.g. eutrophication is a big issue in the Baltic but not the Celtic Seas).

This paper is the result of a collaboration of a wide network of international and national NGOs and also builds on an NGO workshop organised by Seas At Risk (with support by BUND) on 5 March 2014. It is a follow up on guidance papers developed in 2012, when European marine environmental NGOs proposed sets of environmental targets and indicators for the first implementation phase of the Marine Strategy Framework Directive.<sup>3</sup>

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<sup>2</sup> Implementation of the MSFD: results of an ESEC survey on NGO experiences, 2012. [http://www.seas-at-risk.org/1images/ESEC%20questionnaire%20results\\_1.pdf](http://www.seas-at-risk.org/1images/ESEC%20questionnaire%20results_1.pdf)

<sup>3</sup> 2012 joint NGO guidance on public consultations, on Descriptor 3, Descriptors 8 & 9, Descriptor 10, Descriptor 11: <http://www.seas-at-risk.org/n2.php?page=12>

# 2 Priorities for Descriptor 2 – Non-indigenous species

**Descriptor 2: Non-indigenous species (NIS) introduced by human activities are at levels that do not adversely alter the ecosystem**

## 2.1 Background

The invasion by non-indigenous or alien species into new regions and territories is a phenomenon of paramount and global importance. It has been estimated that during the last four centuries invasive alien species have contributed to nearly 40% of animal extinctions with known causes<sup>4</sup>.

Invasive Alien Species (IAS) are a subset of established Non-Indigenous Species (NIS) and are one of the greatest drivers of biodiversity loss, second only to habitat loss and fragmentation. IAS are of growing concern as they are spreading and have an adverse effect on biological diversity, ecosystem functioning, socio economic values and/or human health.

It has been estimated that, of the 12 000 or so alien species that are found in the European environment, between 10% and 15 % have reproduced and spread beyond control, having environmental, economic and social impacts. IAS are estimated to cost the EU at least EUR 12 billion per year. With the increasing trends in the global movement of people and goods, the number and impact of harmful IAS in Europe may grow significantly in the future. In addition, climate change may produce new opportunities for IAS to proliferate and spread.<sup>5</sup>

The EU recently adopted a Regulation on the prevention and management of the introduction and spread of IAS, which will enter into force in 2015<sup>6</sup>. The Plant Health Directive, the Wildlife Trade Regulation, the Habitats and Birds Directives, the Aquaculture Regulation, the Water Framework Directive and other animal and plant related legislative regimes cover certain aspects of IAS only partially and in a fragmented manner, thus making the need to cover policy gaps imperative.

The EU Regulation provides for three types of interventions:

- a) prevention of introductions before they happen;
- b) early warning and rapid response in the early stages of invasion; and
- c) management and control of established populations.

A list of invasive alien species of EU concern will be drawn up by the European Commission, together with the Member States, using risk assessments and scientific evidence. The EU Regulation is intended to bring Europe one step closer to addressing the unintentional or deliberate introduction of invasive species outside of their natural range in a comprehensive and holistic way when it comes to their assessment, management and prevention.

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<sup>4</sup> Secretariat of the Convention on Biological Biodiversity (CBD). Global Biodiversity Outlook 2. Montreal 2006.

<sup>5</sup> European Environment Agency, Technical report No 16/2012, The impacts of invasive alien species in Europe

<sup>6</sup> [https://www.consilium.europa.eu/uedocs/cms\\_Data/docs/pressdata/en/envir/144948.pdf](https://www.consilium.europa.eu/uedocs/cms_Data/docs/pressdata/en/envir/144948.pdf)

The MSFD Descriptor 2 on NIS focuses on the identification, the assessment of pathways and vectors that are responsible for spreading non-indigenous species as a result of human activities and on the estimation of the magnitude of impacts of biological invasions on the marine environment.<sup>7</sup>

The Regional Seas Conventions<sup>8</sup> have addressed NIS by several agreements such as:

- *Barcelona Convention*. The RAC/SPA Action Plan on Invasive Species and the UNEP/MAP Mediterranean Strategy for the management of ships' ballast waters and sediments;
- *HELCOM*. The Ballast Water Road Map adopted by the HELCOM Ministerial Meeting (2007) to facilitate the ratification of the IMO Ballast Water Management Convention;
- *OSPAR*. The Quality Status Report, which provides a detailed list of NIS and highlights the necessity of the OSPAR countries to ratify and implement the IMO BWMC and to assess the risk of new species introduction;
- *Black Sea Convention*. The Black Sea Biodiversity and Landscape Conservation Protocol to the Convention on the Protection of the Black Sea Against Pollution, which includes a reference encouraging the Contracting Parties to take all appropriate measures to regulate an intentional introduction and prevent an accidental introduction of NIS.

## 2.2 Targets proposed by NGOs

According to the Commission's Article 12 Assessment not all MSs defined targets for NIS<sup>9</sup>. Furthermore, the majority of targets and associated indicators lack specification and quantification which prevents the assessment of their achievement.

NGOs propose the following target:

- Stabilisation or reduction of the NIS population trends by year 2020

## 2.3 Measures proposed by NGOs

The above target should be achieved by preventing new invasions, detecting and removing recently-introduced species, not to allowing established non-indigenous species to spread further, and keeping their population trends either stable or in decline.

Measures need to address the human activities that form pathways for the introduction of non-indigenous species in the marine environment, i.e. ballast water of freighters, fouling of ships, 'hitchhiking' of non-indigenous species with goods transported for trade, tourism and aquaculture.

NGOs propose the following measures:

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<sup>7</sup> [http://ec.europa.eu/environment/marine/good-environmental-status/descriptor-2/index\\_en.htm](http://ec.europa.eu/environment/marine/good-environmental-status/descriptor-2/index_en.htm)

<sup>8</sup> Palialexis A, Tornero V, Barbone E, Gonzalez D, Hanke G, Cardoso AC, Hoepffner N, Katsanevakis S, Somma F, Zampoukas N. In Depth Assessment of the EU Member States' Submissions for the Marine Strategy Framework Directive under articles 8, 9 and 10. JRS 2014  
(<http://publications.jrc.ec.europa.eu/repository/bitstream/111111111/30749/1/lbna26473enn.pdf>)

<sup>9</sup> "In Depth Assessment of the EU Member States' Submissions for the Marine Strategy Framework Directive under articles 8, 9 and 10" (JRS 2014)

- Fully implement the new EU Regulation on invasive alien species and ensure its coherence and appropriate synergy with the MSFD.
- Ratify the IMO Convention for the Control and Management of Ships' Ballast Water and Sediments. The entry into force of the Convention is of uttermost importance.
- Encourage the Member States to develop national lists of invasive alien species, and to appoint independent experts for the Scientific forum
- Foster collaboration with global, regional and sub-regional organisations, to address the transboundary aspects of IAS and facilitate regionally coordinated measures and monitoring programs.
- Establish and appropriately link national and regional inventories (continuously being populated and kept up-to-date) of NIS, to underpin comprehensive, coordinated, consistent and effective management actions.
- Create lists of high risk IAS on a regional basis. The lists should be precautionary, based on regional assessments with considerations to both regional environmental conditions as well as exposure to human high risk activities, such as shipping, aquaculture, etc. Furthermore, considerations to longer time perspective must be taken given that in many cases negative effects caused by IAS appear after a considerable length of time (in some cases up to 50 years).
- Ensure that marine organisms are sufficiently represented in the list of invasive alien species to be adopted by the European Commission in 2016.
- Include data collection on marine NIS in the new data collection framework regulation that is currently under revision.
- Undertake management actions that do not focus solely on one vector of for these IAS (even if completely successful, will not stop the invasions) but take into account all vectors. Undertake prevention, eradication, control or management of invasive alien species taking into account climate change/environmental changes.
- Set up an early warning system that will facilitate the rapid identification and early notification of NIS, as well as the mapping of their spread between and within the European Regional Seas, thus enhancing the accuracy of selecting NIS of management consequence. This system should also provide comprehensive information on the principle pathways and vectors of NIS and facilitate the definition of the most invasive species to provide target lists for monitoring.
- Establish and adopt a standardized method (e.g. further testing of the bio-pollution index applied by HELCOM could be a step to the right direction) to classify the impacts of invasive alien species on native species, communities, habitats and ecosystem functioning.
- Regarding aquaculture, use only closed systems to culture non-established exotic/non-native species so that no fingerling /mature fish or parasites/diseases spread from the system. Establish regulation to ensure the disinfection, correct treatment and disposal of their effluent water.
- In the context of IAS, genetic depletion caused by introduction of alien populations should also be included; these can also comprise traits of invasiveness, often connected to e.g. stocking of fish and populations used in aquaculture.
- Give sufficient consideration to ballast water as a pathway for the introduction of invasive alien species in the marine environment, by identifying it as a priority pathway and adopting an Action Plan to prevent the introduction of new organisms.

- Provide funding for research to address research needs and close the knowledge gaps related to IAS, including: effects by IAS on ecosystem services and health; risk assessment methods that take into account the high degree of uncertainty that is typical of data in relation to IAS; criteria for assessing the invasiveness of a species taking into account the quality of available data; predictive habitat and/or niche modelling in order to establish potential areas of new introductions in order to put in place control measures; research on the NIS life cycles to provide a better understanding of the biological characteristics that favour or not the arrival, establishment, spread and impact of NIS would help us to predict future invasions and to suggest management measures to mitigate their impact; etc.
- Improve information and communication to the public on possible impacts of IAS, also including health considerations as well as exchange of information between Member States.
- Strengthen, promote and support citizens' science initiatives with regards to monitoring of NIS or reporting historical information through national, regional, and European networks ([CIESM JellyWatch Program](#), [European Alien Species Information Network](#), etc.) as a means to overcome the difficulties related to tracking the onset of biological invasions.

# 3 Priorities for Descriptor 3 — Commercial fish and shellfish

**Descriptor 3: Populations of all commercially exploited fish and shellfish are within safe biological limits, exhibiting a population age and size distribution that is indicative of a healthy stock.**

## 3.1 Background

Overfishing is still a real problem in European seas; currently 41% of the assessed fish stocks in the North East Atlantic are overfished, and 91% of assessed stocks in the Mediterranean<sup>10</sup>. Overfishing not only dramatically reduces fish stocks but many of the fishing gears used also have devastating impacts on marine habitats and on non-target species such as dolphins and turtles; bottom trawling and by-catch are of particular concern.

The recent reform of the Common Fisheries Policy (CFP) resulted in some important changes, which should contribute to achieving good environmental status (GES). Member States are now committed to restore and maintain fish stocks above biomass levels capable of producing maximum sustainable yield ( $B_{MSY}$ ). In order to reach that they must set fishing limits according to the exploitation rate consistent with this aim ( $F_{MSY}$ ) by 2015 where possible, and at the latest by 2020 for all stocks. In addition, there is a possibility for Member States to reward operators that fish sustainably and in an environmentally friendly way with extra quota, while keeping the total amount of quota within the limits advised by scientists. The wasteful practice of discarding perfectly edible fish overboard will gradually be banned, with the aim to encourage fishers to fish more selectively and avoid unwanted catches.

These changes in the CFP are relevant for Descriptor 3 on populations of commercially exploited fish and shellfish species. For this descriptor, the three criteria for assessing progress towards GES are:

- criterion 3.1 – Level of pressure of the fishing activity (with fishing mortality  $F$  as primary indicator);
- criterion 3.2 – Reproductive capacity of the stock (with Spawning Stock Biomass (SSB) as primary indicator);
- criterion 3.3 – Population age and size distribution (with several primary indicators)

However, Member States have in many cases not fulfilled the obligations under Articles 8-9-10 of the MSFD to outline GES definitions, targets and indicators for Descriptor 3. Many countries have failed to apply legally agreed indicators following the CFP revision and/or to adequately define criterion 3.3. There are often inconsistencies with approaches of neighbouring countries.

In order to be able to assess progress under this descriptor, Member States have to improve data quality for all commercially exploited fish and shellfish species and agree on a common approach in each region towards achieving the targets. It is important that all commercial fish and shellfish species that make up at least 0.1 % of the landings in each region are assessed in relation to this

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<sup>10</sup> [European Commission Communication COM \(2014\) 388](#)

descriptor. All species - including those for which limited data are available - are to be covered by D1 or D4 working groups as well.

For the majority of the EU stocks, the spawning stock biomass levels corresponding to MSY ( $B_{MSY} = SSB_{MSY}$ ) are unknown. Estimates, so called proxies, will therefore be used in the absence of other data. ICES has recently suggested MSY B trigger as a starting point for a proxy for the SSB indicator under the MSFD<sup>11</sup>, for which ICES currently adopts the precautionary spawning stock biomass level (Bpa), a minimum biomass limit that should trigger action to avoid impaired recruitment. In the ICES advice, the MSY B trigger (= Bpa) is used as the lower limit in the  $B_{MSY}$  range when stocks are exploited at  $F_{MSY}$ .

However, it is our view, that making  $B_{MSY}$  equal to Bpa – even as a starting point – is very unambitious, as it is the **minimum biomass limits** that trigger action to avoid recruit impairment (Bpa) and not equivalent to a **biomass target** which was agreed by the EU co-legislators. This would be in conflict with one of the main objectives of the Common Fisheries Policy (Art. 2.2), which shall aim to ensure that *“exploitation of living marine biological resources restores and maintains populations of harvested species **above levels** which can produce the maximum sustainable yield.”*

If Bpa is used as a baseline for  $B_{MSY}$ , an important opportunity to safeguard the future health of European fish stocks will be lost, and with it potentially the objective of the MSFD: to achieve healthy seas for future generations.

However, while the achievement of MSY is a step in the right direction for the recovery of European fish stocks, it will not guarantee that stocks are maintained in a healthy condition. Healthy fish stocks are typically characterised by a varied age class range often with a relatively high proportion of sexually mature, older and larger individuals. Such population characteristics are important for the resilience of the stock to natural variability and human induced pressures, as well for the resilience of the whole ecosystem, since different sizes and ages of fish have different ecological functions.

An example of the shortcomings of only focusing on MSY is the Baltic Sea cod stocks. The Eastern stock is estimated to be recovering from a low individual count in early 2000 and has been fished at MSY for several years. However, the stock now consists of more or less only small or very small individuals – clearly far from a healthy stock – because management has not addressed the objective of a healthy size and age distribution.

With the list of targets and priority measures below we aim to provide Member States with the measures that will lead to successful achievement of good environmental status by 2020.

## 3.2 Targets proposed by NGOs

- The stock biomass of all commercial fish and shellfish species is above  $B_{MSY}$ .
- The fishing mortality for all commercial stocks is below  $F_{MSY}$ .
- The population age and size distribution shows sufficient sexual mature individuals in the population.
- The age and size distribution indicator indicative of sexual maturity and spawning capacity is given equal priority with the other criteria when setting targets for this descriptor. Although we acknowledge that there is a need for better data related to criterion 3.3, it should be stressed that methodologies for defining this objective already exist, even when there is insufficient data for many stocks.

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<sup>11</sup>EU request on draft recommendations for the assessment of MSFD Descriptor 3. ICES advice 2014, book 1.

- The natural range of the species of commercially exploited shellfish is restored or maintained, unless scientifically explained as a shift due to climate change.

### 3.3 Measures proposed by NGOs

- Set fishing limits for all commercially exploited species below  $F_{MSY}$  ( $F_{MSY}$  should be a limit rather than a target reference point – and in order to ensure that the limit is not exceeded, Member States should aim at a fishing mortality below  $F_{MSY}$ ).
- In mixed fisheries, base management on the most vulnerable stock.
- Improve scientific knowledge on stock status, composition and exploitation rates that lead to sufficiently robust baseline data allowing the assessments of full indicators instead of proxies in the near future.
- Set transparent criteria for the allocation of access to fishing resources (quota or days at sea), and include environmental criteria to incentivise best environmental practice and low impact fisheries.
- Reduce bycatch of non-target species and sexually immature fish through gear limitations and adjustments, (temporary) area closures, and other technical measures and include these measures in regional discard- and management plans.
- Include all Member States with a fishing interest in a region in the development of regional management plans.
- Adjust fishing capacity of the fleet to available fishing opportunities.
- Ensure sufficient control and enforcement.
- Collect and make publicly available full real time information on boat movements including shellfish harvest vessels and areas openings and closures to fishing for shellfish.

# 4 Priorities for Descriptors 1, 4 and 6 — Biodiversity

**Descriptor 1: Biodiversity is maintained**

**Descriptor 4: Elements of food webs ensure long-term abundance and reproduction**

**Descriptor 6: The sea floor integrity ensures functioning of the ecosystem**

## 4.1 Background

The EU's marine environment was once incredibly rich, productive and diverse. Today, whether looking at marine species (fish, mammals, birds, invertebrates or reptiles) or habitats less than 20 % (often much lower) of all biodiversity features (i.e. species, habitats, and ecosystems) are considered as being in Good Environmental Status<sup>12</sup>. This pattern is consistent throughout all the marine regions, except the Black Sea where the status of all biodiversity features is reported as 'unknown'<sup>13</sup>. Ambitious, strong and urgent measures are therefore needed to address this issue and implement the Biodiversity Descriptors of MSFD.

There are a broad range of cross-cutting and sectoral conservation measures, e.g. increasing selectivity of fishing gear, closed areas etc., that will need to be implemented to achieve the biodiversity elements of GES. However, the creation of Marine Protected Areas (MPAs) is one of the most important tools to effectively deliver those MSFD Descriptors as they protect or recover a proportion of all marine habitats from exploitation. MPAs are also specifically mentioned in the Directive under Article 13.4.

While Member States have made a start in establishing MPAs, primarily to meet requirements under the Habitats and Birds Directives, they still have a long way to go to achieve a full Ecologically Coherent Network, in meeting ecological criteria and also, subsequently, in implementing effective regulations and measures to ensure that sites are well managed.

Protection of each regional sea varies from as little as 2% to just over 10%<sup>14</sup>, which is inadequate for ecological coherence. Historically, these Habitats and Birds Directives were not designed to apply to the offshore and deep water marine environment, so the list of marine habitats and species to be protected is quite limited and not scientifically up-to-date. However, Regional Seas Conventions (RSCs) - HELCOM, BARCON, OSPAR, and Bucharest Convention – have adopted more comprehensive lists of species and habitats in need of protection and a number of Member States, e.g. Germany and the UK, have amended existing nature legislation or introduced new legislation to enable MPAs to be designated for these habitats and species.

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<sup>12</sup> European Environment Agency. 2014. [Marine Messages](#): Our seas, our future — moving towards a new understanding.

<sup>13</sup> Ibid.

<sup>14</sup> European Environment Agency. 2012. Protected Areas in Europe: An Overview

The RSCs are also engaged in working with contracting parties to establish regional networks of MPAs within their own marine regions, and are presently evaluating gaps and ecological coherence of their networks together with the European Commission. They will therefore provide for an important input in the development of the spatial protection measures of the MSFD Programmes of Measures.

MPAs also need to be well managed if they are to contribute to MSFD GES. Well managed sites prevent damaging activities, allow seabeds to recover (allowing seafloor integrity to be restored), have the necessary monitoring mechanisms, and can be well-enforced. Most European Marine Sites (Special Areas of Conservation and Special Protection Areas) still have inadequate management measures to prevent damaging activities.

## 4.2 Measures proposed by NGOs: establishing a network of well managed MPAs

We call on Member States as a matter of priority to:

- **Urgently develop an ecologically coherent network of well managed Marine Protected Areas. This must meet international principles on coherence and protect at least 30% of all representative habitats in EU waters, including the full range of biodiversity present<sup>15 16 17</sup>. This network must be properly managed and protected from all damaging activities, most notably bottom towed fishing gear (due to its impact and spatial footprint).**
- To deliver on Descriptor 6, it is additionally important to protect Vulnerable Marine Ecosystems (VMEs)<sup>18</sup> from physical disturbance such as bottom fishing in all EU marine waters (within and beyond MPAs). Some MS have (via the CFP regulatory system) put in place such closures to destructive fishing already, others are lagging behind.

To achieve an ecologically coherent network of well managed MPAs NGOs propose the following step-wise approach to identify their MPA needs and adopt effective measures to address their existing gaps.

### 4.2.1 Identify the full range of representative features:

Member States should identify features in their marine areas (habitats, species, communities and ecological processes) in compliance with Regional Seas Conventions lists. In the case of English inshore and offshore waters, 23 broadscale habitat categories were identified in order to act as 'surrogates' for wider species and finer-scale habitats in UK seas. These were identified from EUNIS level 3 scale. Member States should also map the occurrence of Vulnerable Marine Ecosystems.

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<sup>15</sup> Gell F.R., Roberts C.M. (2003). Benefits beyond boundaries: the fishery effects of marine reserves. *Trends in ecology and Evolution* 18(9) 448-455

<sup>16</sup> Roberts, C.M., Hawkins, J.P. (2000). Fully protected marine reserves: A Guide, WWF Endangered Species Campaign, Washington DC and University of York. <http://billhutten.s3.amazonaws.com/fw/docs/345.pdf>

<sup>17</sup> Wood, L.J., Fish, L., Laughren, J., Pauly, D. (2008). Assessing progress towards global marine protection targets: Shortfalls in information and action. *Oryx* 42(3):340-351.

[www.bipindicators.net/LinkClick.aspx?fileticket=c0ZrnqIYa8Y%3D&tabid=71&mid=519](http://www.bipindicators.net/LinkClick.aspx?fileticket=c0ZrnqIYa8Y%3D&tabid=71&mid=519)

<sup>19</sup> E.g. for English waters - <http://jncc.defra.gov.uk/page-4527> and habitats of conservation concern.

## 4.2.2 Determine the gaps for an ecologically coherent network

An ecologically coherent network of MPAs needs to adhere to strict principles if it is to achieve coherence. We believe the following principles, that build on OSPAR ones<sup>19</sup>, should be followed as a minimum:

- **Representivity** – MPAs must represent the full range of habitats and species in the marine area.
- **Replication** – MPAs for each broadscale habitat need to be replicated throughout each biogeographic region.
- **Adequacy** – the amount that is protected for each representative broadscale habitat should not be less than 30% of that feature, and for rarer features that percentage should be much higher (up to 100% for rare habitats such as seagrass beds and maerl). This measure can be carried out by looking at species-area curves. This was used to identify how much surface area of different representative habitats was required to be protected to ‘capture’ the vast majority of constituent species within the UK MPA network<sup>20</sup>. This science is not new, and allows nature conservation advisors to tell governments on how much of representative habitat space needs to be protected in order to allow a significant proportion of the seabed to recover its natural range and climax status of marine species and habitats. For European Marine Sites alone the EC recommends protection of 20-60% of the listed habitats and species in their waters<sup>21</sup>.
- **Viability** – sites should primarily be large in order to be viable in protecting the majority of life-history stages of constituent species within the MPA boundary and to ensure that ‘edge effects’ of potentially damaging activities don’t impinge on feature condition inside sites. Additional buffer zones will help ensure this protection.
- **Connectivity** – sites should be not more than 80 km apart, and ideally should be no more than 50 km apart.
- **Best available evidence** – should be used. A lack of detailed information on broadscale habitat or species distribution should not be a reason to delay designation of a network of sites.
- **Favourable condition** – sites should be selected based on representation of all broadscale habitats, but those areas in more favourable condition should be prioritized where there is choice. This is particularly important for vulnerable, rare or threatened species.
- **Mobile species** – sites identified as important for key life stages of mobile species, such as feeding, breeding, spawning and nursery grounds should also be selected.
- **Vulnerable Marine Ecosystems** – to deliver on Descriptor 6, it is additionally important to protect Vulnerable Marine Ecosystems (VMEs)<sup>22</sup> from physical disturbance such as bottom fishing in all EU marine waters (within and beyond MPAs). Some MS have (via the CFP regulatory system) brought in place such closures to destructive fishing already, others are lagging behind.

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<sup>19</sup> E.g. for English waters - <http://jncc.defra.gov.uk/page-4527> and habitats of conservation concern.

<sup>20</sup> Rondinini, C. 2010. Meeting the MPA network design principles of representation and adequacy: developing species-area curves for habitats. JNCC Report No. 439

<sup>21</sup> European Commission. Guidelines for the establishment of the Natura 2000 network in the marine environment.

### 4.2.3 Identify sites to fill these gaps

These should consist of a mix of sites under different frameworks in order to fully mobilise the potential of the MSFD and deliver wide-ranging benefits:

- **Additional N2000 sites** to completely fulfil obligations under the Habitats and Birds Directives, including designations in all areas up to the offshore limit of Member State jurisdiction.
- **Regional Seas Convention Sites** (HELCOM, OSPAR, BARCON, and Bucharest Convention) to cover regionally listed habitats and species not covered by EU legislation, as well as to include ecological processes as designation criteria. These include OSPAR MPAs, the Baltic Sea Protected Areas (BSPA) for HELCOM, the List of Specially Protected Areas for Mediterranean Importance (SPAMI) in the Barcelona Convention framework, the projects launched by the Commission for the Protection of the Black Sea against Pollution on Specially Protected Areas and MPAs. Under the MSFD PoM, new sites need to be designated to protect a range of habitats not covered by other sites such as *Zostera* and *Cymodocea* beds, maerl beds, sponge aggregations, hydrothermal vents, burrowing megafauna communities, along with a range of species including seahorses, European eel, cod, halibut, bluefin tuna, orca, sperm whale, sharks & rays as well as many other crustacean and invertebrate species. Regional Conventions also provide the legal and technical tools to designate MPAs in areas beyond national jurisdiction, to which the EU is committed.
- **Other international agreements** such as the Emerald Network, Ramsar sites, Man and Biosphere Reserves, the Agreement on the Conservation of Cetaceans and the Black Sea, Mediterranean Sea and Contiguous Atlantic Area and Baltic Sea (ACCOBAMS, ASCOBANS), Convention on Migratory Species.
- **National Sites** to cover nationally important habitats and species. Some countries are making progress in designating national sites, e.g. England 27 with 100 more under consideration etc.

### 4.2.4 Designate sites

- Sites should be designated for representative habitats and species relevant to individual national marine biodiversity, but Sub-features may also be listed in the designation. It is important to provide national sub-feature designations because different EU Member States have different features (e.g. Norway and Scotland have deep-water fjordic sea lochs, while England does not).
- Some Member States may need to develop or amend national legislation to provide the legal basis for the designation, and effective management of sites. For example the UK developed the Marine and Coastal Access Act to enable the designation of a network of Marine Conservation Zones.
- Include a conservation objective for each site in the designation order, ideally with its contribution to the wider GES objective. The latter may vary from achieving Favourable Conservation Status under the Habitats Directive, to Recovery under the CFP's Fish Stock Recovery Area. Recovery of most MPAs will be essential if GES is to be achieved, particularly for seabed habitats where bottom trawling has historically occurred, even at irregular intervals.

### 4.2.5 Ensure MPAs are well managed

Paper parks will not achieve MSFD. MPAs must be effectively and well managed to:

- **Manage/halt all damaging activities** in existing and future MPAs. Achieving MSFD biodiversity descriptors will require existing management measures to be strengthened in some cases and for new management measures to be adopted in other sites. For instance stronger measures

are needed to protect seafloor integrity and halt bottom trawling in all MPAs. Other measures could include seasonal or real-time closures if by-catch rates are above certain threshold, or control of recreational fisheries through licensing.

- **MPAs must strive for biodiversity recovery.** Reducing the ability of ecosystems to achieve climax community status by allowing persistent, chronic damaging events such as occasional unregulated bottom trawling reduces the complexity of seabed habitat. This then reduces the ability of a number of vulnerable species to recruit onto the seabed, and contribute their unique ecological role and productivity<sup>23</sup>. For example, bottom trawling has reduced the capacity for filter feeding on the seabed by removing most sponges, corals and bryozoans. Thus the filter-feeding and nutrient uptake role of these elements is lost.
- **Implement Article 6(2) and 6(3)** of the Habitats Directive correctly. Potentially damaging fishing activity, in particular, must be considered as a “project or a plan” under the Directive and must be stopped if it has a likely significant effect on a site<sup>24</sup>. It should only be licensed if an Appropriate Assessment proves the fisheries will not have an adverse effect on the integrity of the site or the conservation status of its habitats and species.
- **Implement Article 11 of CFP** which facilitates the introduction of technical measures to manage and restrict fisheries in protected areas.
- **Buffer zones**<sup>25</sup> should be set up to protect boundary areas of sites, sediment resuspension and transport into the site, and features and to prevent encroachment.
- **Marine Reserves** are needed as part of a network to enable improved recovery of all areas of the ecosystems, allow quicker recolonisation and provide higher protection level to most vulnerable areas. They will also be vital to gauge the impact of different human activities on a wide range of features. At the V<sup>th</sup> World Parks Congress in 2003 the recommendation was made that “these networks [of MPAs] should include strictly protected areas that amount to at least 20–30% of each habitat”<sup>26</sup>, which we agree is essential to achieve GES. Attempting scientific assessment of the current state of the marine environment without being able to refer to a suite of sites where a wide range of habitats are fully protected is a fundamental failure of management. Marine Reserves will allow all levels of the ecosystem, and their connected constituent parts to achieve something approaching climax community states, allow us to understand more natural relative abundances of species, and to observe natural rates of community change with markedly reduced human impact.
- **Whole sites**, and NOT just features, should be protected from the most damaging activities. This is a key description of ecosystem-based management. Current EU MPA legislative frameworks are reductionist to protection of ‘features’, yet elements of the marine environment do not act in isolation. Measures should protect entire sites where possible, and

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<sup>23</sup> Hermson et al (2003). Mobile fishing gear reduces benthic megafaunal production on Georges Bank. *MEPS* 97-108.

<sup>24</sup> Regardless if it was an ongoing fishery at time of designation, as it may be suppressing the sites’ attainment of favourable conservation status, and particularly will reduce the ability of seafloor integrity of species and habitats to be achieved.

<sup>25</sup> Buffer zones are generally set at 4 x the water depth at which the site is based (Natural England and JNCC advice) [jncc.defra.gov.uk/pdf/100705\\_ENG\\_v10.pdf](https://jncc.defra.gov.uk/pdf/100705_ENG_v10.pdf). page 122.

<sup>26</sup> IUCN (2003) Recommendations of the Vth IUCN World Parks Congress. IUCN, Gland, Switzerland.

where habitat linkage can be assumed between designated features, particularly where legislation allows this (e.g. site integrity clauses in the Habitats Directive<sup>27</sup>).

- **The network and wider seas:** measures to meet the “network component” and linkages at regional scale will be crucial to meet other MSFD targets (e.g. climate adaptation for species). It will also be necessary to adopt other non-spatial measures applicable inside and outside of MPAs to target certain pressures at a larger scale than individual MPAs.
- **Monitor:** all sites will need monitoring to assess whether we are achieving the biodiversity descriptors. In particular unless we monitor reference areas we cannot gauge the impact of human activities in the wider seas.
- **Provide agencies with necessary powers and duties.** New powers and duties may need to be provided to marine agencies, both fisheries regulators and conservation agencies, to ensure they are able to manage MPAs effectively. For example in the UK a new agency, the Marine Management Organisation, was established and the Sea Fisheries Committees had their powers and duties changed along with their name to the Inshore Fisheries and Conservation Authorities.
- **Vulnerable Marine Ecosystems** must be protected from bottom trawling.

#### 4.2.6 Apply ecosystem-based Maritime Spatial Planning (MSP)

Maritime spatial planning (MSP), if used sensibly, can and should support conservation measures, in particular an ecologically coherent and well-managed network of Marine Protected Areas. This includes:

- supporting effective management inside protected sites,
- supporting the connectivity of sites outside their boundaries,
- safeguarding areas known to be ecologically important but which are not yet protected,
- having strong wider objectives for healthy ecosystems which are resilient to human and climate-induced changes.

In addition these plans must proactively seek to keep collective human pressures within sustainable levels through the best use of marine space, by:

- Basing plan policies for human activities on environmental sensitivity/compatibility as well as technical opportunity.
- Linking plan policies to MSFD Descriptors where they cause relevant pressures.
- Clearly showing how different plan policies interact with each other in a given area.
- Addressing and minimising cumulative impacts at a strategic plan level

#### 4.2.7 Assess the social and economic benefits of MPAs

Under MSFD Article 13(3) Member States need to give consideration to sustainable development and the social and economic impacts of the measures envisaged, including through impact assessments and cost-benefit analysis. We believe it is essential that such assessments must

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<sup>27</sup> Rees, S.E., et al. A legal and ecological perspective of ‘site integrity’ to inform policy development and management of Special Areas of Conservation in Europe. *Mar. Pollut. Bull.* (2013), <http://dx.doi.org/10.1016/j.marpolbul.2013.03.036>

calculate the social and economic *benefits* of MPA networks too, which run into billions of Euros and are likely to far outweigh any costs. These benefits range from ecosystem services of carbon and nutrient cycling to direct economic benefits from diving and angling and re-stocking fisheries, e.g. increasing MPA coverage to 10% would result in an estimated €2.5-3.8 billion per year improvement in 7 eco services and €1 bn per year off-site fisheries benefits<sup>28 29</sup>.

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<sup>28</sup> European Commission. Estimating the Overall Economic Value of the Benefits provided by the Natura 2000 Network  
[http://ec.europa.eu/environment/nature/natura2000/financing/docs/Economic\\_Benefits\\_of\\_Natura\\_2000\\_report.pdf](http://ec.europa.eu/environment/nature/natura2000/financing/docs/Economic_Benefits_of_Natura_2000_report.pdf)

<sup>29</sup> European Commission Staff Working Paper FINANCING NATURA 2000 Investing in Natura 2000: Delivering benefits for nature and people Brussels, 12.12.2011 SEC(2011) 1573 final  
[http://ec.europa.eu/environment/nature/natura2000/financing/docs/financing\\_natura2000.pdf](http://ec.europa.eu/environment/nature/natura2000/financing/docs/financing_natura2000.pdf)

# 5 Priorities for Descriptor 5 — Eutrophication

**Descriptor 5: Human-induced eutrophication is minimised, especially adverse effects thereof, such as losses in biodiversity, ecosystem degradation, harmful algal blooms and oxygen deficiency in bottom waters**

## 5.1 Background

In spite of being a well-known and long-lasting problem, eutrophication still affects the majority of European water bodies. The review of the first cycle of the Water Framework Directive (WFD) in Europe shows that eutrophication is a serious problem in many European river systems and lakes, and that the agriculture sector is the main contributor to nutrient enrichment.<sup>30</sup>

In the marine environment levels of nutrients are overall still above acceptable limits. Oxygen depletion, as a result of nutrient pollution, is particularly serious in the Baltic and Black seas (see Article 12 review of the European Commission<sup>31</sup>), but is also a problem in the Adriatic and North Seas.

The assessment of the European Commission reveals that despite the imminent threat to our seas, most Member States do not show any ambitions to reach a Good Environmental Status by 2020. For eutrophication most Member States failed to make the (crucial) link between the MSFD work and the work, knowledge and targets set under the WFD – an omission that shows the lack of ambition and national coherence.

The fact that many MS have failed to set quantifiable targets and proper GES makes measures difficult or impossible to evaluate, and this must be improved and addressed directly in the PoM. The lack of coherence is also clearly visible at regional and international level. Eutrophication is a threat to our ecosystems that inherently has to be tackled at regional level. Joint indicators and targets must be set up and included in the PoM, and those that are already used must be streamlined to work jointly towards healthy European seas.

Furthermore it is essential that existing legislation within the EU and the RSCs that the reduction objectives for eutrophication are enforced without any further delay. The Nitrate Directive, the WFD, the Urban Waste Water Treatment Directive and the actions and measures agreed in the RSCs set a frame in which the eutrophication problem can be approached immediately and ambitiously. Subsidies within the Common Agriculture Policy have to be used towards the implementation of existing legislation with the goal to minimise eutrophication and secure the protection and restoration of our seas. The Environmental Impact Assessment and Strategic Environmental Assessment Directives represent tools through which harmful actions can be assessed and mitigated.

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<sup>30</sup> COM(2012)673; ETC/ICM technical Report 1/2012; OSPAR Quality Status report 2010

<sup>31</sup> [http://ec.europa.eu/environment/marine/eu-coast-and-marine-policy/implementation/reports\\_en.htm](http://ec.europa.eu/environment/marine/eu-coast-and-marine-policy/implementation/reports_en.htm)

## 5.2 Targets proposed by NGOs

- Minimise the pollution load of nitrogen (N) and phosphorus (P) to regional seas and their drainage basins, supporting and restoring a natural functioning marine ecosystem where the native biodiversity can thrive.
- Introduce mandatory nutrient-balanced fertilisation practices on farmland for N and P, to save nutrient resources and prevent over-fertilisation. Sustainable agriculture practices must be supported while conventional industrial farming must be reduced.
- Equalise standards for nutrient removal for all sources of nutrient waste water discharges throughout Member States.
- Ensure that shipping fulfils high standards - Best Practice – to reduce NOx emissions and waste water discharges with nutrients.
- Allow no marine aquaculture operation that may lead to increased areas of anoxic or dead bottoms.

## 5.3 Measures proposed by NGOs

We request the Commission, RSCs and Member States to implement the following measures to minimise the pollution load of nitrogen and phosphorus to regional seas and their drainage basins, supporting and restoring a natural functioning marine ecosystem where the native biodiversity can thrive:

### 5.3.1 Reduce agriculture nutrient run-off

#### ***CAP and water protection***

The aim of EU-CAP subsidies, public money, is to help farmers to comply with EU-regulations, such as environmental obligation based on WFD or MSFD, via a cross-compliance mechanism. As the agricultural sector is the main contributor of harmful nutrient pollution, substantial CAP-subsidies must be used to contribute to the solution of the eutrophication problem in European waters.

- Increase financial support for low nutrient-surplus agriculture and nutrient-balanced fertilization practices.
- Increase financial support for sustainable agriculture, such as ecological recycling agriculture and organic farming (which usually have fertilisation practices that reduce the nutrient surplus per ha by 50% compared to conventional agriculture).
- All member States should set up a target for the proportion of organic farming, amounting to no less than 20 percent of arable land to be organically farmed by 2020. The aim should be to reach 100 percent organic farming by 2050.
- Expand Nitrate Vulnerable Zones (in case the whole MS is not designated as a NVZ) to include all farmland with high-risk for nutrient leakage.
- Stop CAP-subsidies of intensive farming and industrial animal farming.
- Enforce or put into place binding legislation (e.g. Helsinki Convention Annex III –Prevention of pollution from agriculture) for nutrient balanced fertilization.
- Introduce mandatory annual nutrient accounting/bookkeeping (N and P) at farm level, giving possibility to account for balanced fertilization.

- Introduce mandatory requirements to calculate nutrient surplus (for both N and P) per hectare at farm level (preferably as soil/field balance or farm-gate balance). Develop tolerable national nutrient surplus levels, to be reduced to a minimum. Never allow P-fertilization on P-saturated soils (max. 0 kg P/ha as soil/field balance).
- Guarantee higher N and P input efficiency of livestock manure via legal standards, to reach full utilization of nutrient content of manure (via analyses) in fertilization practices to avoid over-fertilization
- Introduce mandatory regulations for minimum 10m buffer stripes along ditches/watercourses
- Introduce national permit procedures for drainage and ditching operations in the agricultural landscape to restrict drainage operations, with the purpose to maintain nutrient traps in the agricultural landscape. Phase-out subsidies for ditching and drainage operation in agricultural landscape areas.
- Introduce national requirements to increase the area of wintergreen catch-crops with at least 10 % for utilized agricultural land, compared to the situation in 2011.
- Keep the proportion of permanent grassland at least at the same national level as for the year 2011, to avoid potential increase of nutrient run-off from ploughed grasslands.

#### ***Intensive livestock production***

- Reduce the import of cheap food for livestock, e.g. soya-proteins, from outside Europe, which create nutrient surplus on European farmland.
- Combine crop production and animal husbandry, thus allowing for nutrients recycling at farm/regional level.
- Limit livestock size (animal density) to always be balanced with size of farmland available and guarantee of sustainable use of produced manure /nutrient-balanced fertilization.

### **5.3.2 Ensure nutrient removal from waste water**

- Support introduction of sustainable waste water systems, that do not discharge nutrients to the wastewater, and instead separate clean nutrients as a resource to be used as fertilizer.

### **5.3.3 Implement the Clean Ship concept**

- Reduce NO<sub>x</sub> emissions from ships and introduce stronger restriction for NO<sub>x</sub>-emissions in sea areas sensitive for eutrophication, e.g. via NECA.
- Introduce mandatory requirements for cruising ships to leave its waste water at reception facilities in cruising ports, when such installations have been constructed.
- Introduce No-Special-Fee systems in ports within sea areas sensitive for eutrophication, to support and motivate ships to dispose of waste water, garbage etc. in harbour reception facilities.

### **5.3.4 Implement nutrient-balanced aquaculture**

- Guidelines for nutrient loads and mapping of areas that can sustain aquaculture operations
- Compensation measures –if applicable- must be science based and have effect in close vicinity of operations
- Demand nutrient budgets for all operations, requiring a nutrient balanced process
- No open cage systems in or near protected areas or in areas affected by eutrophication

# 6 Priorities for Descriptors 8 and 9

## — Contaminants

**Descriptor 8:** Contaminants are at a level not giving rise to pollution effects.

**Descriptor 9:** Contaminants in fish and other seafood for human consumption do not exceed levels established by Community legislation or other relevant standards.

### 6.1 Background

Chemical pollution is one of the main pressures affecting the marine environment today. Most sources can be found on land such as industrial discharge, agri- and aquaculture run-off, waste water discharge and traffic. Others are generated at sea through boating, oil spills, offshore oil and gas platforms, dredging, fishing and naval activities.

Over the past few decades approximately 100,000 chemicals have been produced for commercial uses and have entered the European market. The impacts of these chemicals are often unknown, including concentrations and behaviour within the water and sediment columns and toxicological impacts on the ecosystems. The compounds of the highest concern are generally those that are persistent, toxic and bio-accumulative.

### 6.2 Targets proposed by NGOs

- Targets should be set on both biological effects and chemical measurements in order to be able to address effects that are potentially caused by a wide range of contaminants as well as those that are more clearly linked to specific compounds or groups of compounds.
- Concentrations of contaminants in marine water, sediment and/or biota as well as levels of contaminant in fish and other seafood for human consumption should be drastically reduced by 2020.
- Pollution effects in organisms, population, community and ecosystems are not acceptable and should be drastically reduced by 2020. Targets must take into account the synergistic effect of contaminants, single value ecotoxicological data are hence not sufficient to foresee the effects on biota.
- GES targets for contaminants in the marine environment should at least consider the following contaminants for which regulatory levels for human consumption have been laid down:
  - Heavy metals: lead, cadmium and mercury;
  - Polycyclic aromatic hydrocarbons (PAHs);
  - Dioxins including dioxin like Polychlorinated Biphenyls (PCBs);
  - Radionuclides;
- In addition, the following contaminants of concern should be monitored:

- Nondioxin like PCBs;
- Brominated flame retardants (BFRs);
- Polyfluorinated compounds (PFCs), such as perfluorooctanoic acid (PFOA) and perfluorooctanesulfonate (PFOS);
- Arsenic;
- Organotin compounds, preferably tributyltin (TBT), triphenyltin (TPT) and dibutyltin (DBT);
- Phthalates, preferably butylbenzyl phthalate (BBP), di-butylphthalate (DBP), bis(2ethylhexyl)phthalate (DEHP), di-isodecylphthalate (DIDP), di-isononylphthalate (DINP), and di-isobutylphthalate (DIBP).

## 6.3 Measures proposed by NGOs

Pollution effects on biota have been demonstrated for all European seas. In some European seas, not in the least the Baltic Sea, fish and seafood is currently not safe to eat, not for humans, nor for other top predators such as seals and birds of prey. Additionally, the marine environment is in some areas irreversibly affected and the biodiversity significantly reduced by contaminants. The current situation is hence far away from GES.

We therefore request the Commission, RSCs and Ministers to implement the following measures to reduce contaminants in the marine environment.

### 6.3.1 For land-based including diffuse sources:

- The handling of chemicals and products in society must be based on the Precautionary Principle, which means that:
  - Substances with unknown or insufficiently known properties must be classified and handled as dangerous until the opposite is proven.
  - Substances that are persistent, bio-accumulative or hazardous/toxic in another way must phase out quickly and replaced by alternative substance.
  - Special care is required for population groups with increased vulnerability for exposure such as children, pregnant women, industrial workers and “hot-spot” communities.
  - Hazardous substances must be replaced by less hazardous ones or other technology (the Substitution Principle)
- Modernise certain industrial processes in the chemical industry, such as shifting to mercury-free catalysis in the chlore-alkali sector, in order to reduce methyl mercury in seafood.
- Systematically inspect and report risk to fish and fish products through the EU Rapid Alert System for Food and Feed (RASFF).

### 6.3.2 For sea-based sources:

- Ban environmentally harmful antifouling paints with toxic, long-lived or bio accumulative substances in favour of alternative mechanical methods or biologically active antifouling agents.
- Phase out old two-stroke engines which release one third of their fuel unburned into the water or require them to be run on the less toxic alkylate petrol.

- Set high standards to reduce emission of contaminants from offshore oil and gas platforms, through the setting of stricter emission levels for discharge of produced waters (a mixture of hydrocarbons and water) and drilling fluids.
- Only allow removal of contaminated sediments when activation and further dispersal of hazardous substances can be prevented. Dumping of polluted sediments should not be allowed at sea, but be appropriately treated and reused or disposed in confined facilities.
- Ban dumping of ammunition at sea and retrieve already dumped ammunition.
- Ban lead and other heavy metals in ammunition that may be dispersed into the marine environment. Military activities must be placed under the same environmental requirements.
- Prohibit the use of lead in fishing weights, both in commercial and recreational fisheries.
- Set strict limits to the use of active substances in aquaculture, including etoxyquin used as antioxidants in fish feed, or teflubenzuron as parasites pesticides.
- Ratify and implement the International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea (HNS convention).

### 6.3.3 Research and monitoring needs

Given the production of new chemical compounds and their potential release into the marine environment, more elaborated and targeted monitoring schemes must be developed to detect potentially toxicologically or eco-toxicologically significant concentrations or biological effects. In addition, more integrated monitoring between the different Member States and regions as well as harmonisation and coherence with existing assessments/monitoring programs under EU legislation and Regional Seas Conventions should be accomplished.

Member States are urged to address these by:

- Increasing understanding of the biological effects and ecosystem responses, including mixture effects and/or interactions between contaminants and other environmental stressors on marine biota.
- Increasing knowledge on marine food webs with regard to contaminants, including bioaccumulation and biomagnification, and the possibility of additive, synergistic and antagonistic effects.
- Developing better methods for the monitoring of contaminants, also in the deep sea.
- Identifying pollution sources and inputs.
- Increasing cooperation between different monitoring programs, including monitoring and control at sea for illegal discharge with SLAR radars and Infrared equipment. And achieve the objective to harmonise the politic of repression of this environmental infraction to reduce flag and jurisdictional dumping.
- Actively engage in existing research project, such as the EU funded project ECsafeSEAFOOD, which aims at exploring the relationship between the contamination of the marine environment and seafood quality.

# 7 Priorities for Descriptor 10 — Marine litter

**Descriptor 10: Properties and quantities of marine litter do not cause harm to the coastal and marine environment**

## 7.1 Background

Marine litter is a growing problem worldwide, with millions of tonnes of litter ending up in the marine environment every year. Plastic makes up the major part of marine litter, with items eventually breaking up into ever smaller particles. Large scale, cost effective removal of marine litter is currently not possible, the only way to reduce the problem is by ending the input to the seas.

The Marine Strategy Framework Directive (MSFD) is currently the only piece of EU legislation to address the issue, meaning that strong and ambitious measures under this directive are vital. Member states have however in the most part failed to set ambitious quantitative targets for the reduction of marine litter under Art. 8 of the MSFD, instead setting themselves goals based around variations of a 'downward trend' in marine litter.

Drastic cuts in the input of marine litter are fully possible with the right measures, driven by SMART targets and measured with appropriate monitoring programmes. The sources and pathways of marine litter are complex, and touch upon many different areas including waste management on land, fisheries, shipping, sewage treatment and tourism. Therefore efforts to tackle the problem will necessarily stretch beyond the traditional realm of marine policy.

Marine litter is a transboundary problem, so measures will have the greatest impact when coordinated at a regional or sub-regional level. So far attempts at coordination have been weak, and we hope that by outlining the measures and targets necessary to achieve GES by 2020 we can encourage Member States to set ambitious and coordinated programmes of measures.

We call on policy makers to:

- Ensure that the precautionary principle is respected by urgently implementing measures based on the current evidence of harm and the world wide prevalence of marine litter.
- Accept that, due to the complex causes of marine litter, effective measures will necessarily address a wide range of policy areas in order to deal with the complex web of land and sea based inputs.
- Lead the way in minimising marine litter, both in Europe and internationally, by actively raising the issue with other competent authorities.

## 7.2 Targets proposed by NGOs

- The ultimate target should be to end the input of litter to the seas within a generation (by 2035).
- Set a 50%, legally binding, quantitative reduction target for 2020, as a stepping stone towards achieving Good Environmental Status.
- Adopt binding, ambitious recycling and waste prevention targets, including a specific plastic packaging recycling target to reduce the damage this specific waste stream inflicts on the marine environment.

## 7.3 Measures proposed by NGOs

Many of the measures proposed here are aimed at the EU level, but Member States can ensure full implementation of existing legislation while requesting that the European Commission makes the necessary changes to policy in order to facilitate the achievement of GES.

- Foster collaboration with global, regional and sub-regional organisations, to address the transboundary aspects of marine litter and facilitate regionally coordinated measures and monitoring programs.
- Implement and fully enforce the 'general prohibition' on waste discharge from ships to the sea (IMO's Annex V of MARPOL 73/78).
- Implement ambitious waste management policies as a priority, in order to reduce waste production and move towards a circular economy.
- Promote economic instruments that support the full implementation of the waste hierarchy, such as extended producer responsibility, pay-as-you-throw schemes and the taxation of resources where appropriate.
- Ban at EU level plastic micro beads in personal care products, and move towards using alternative materials in other applications where micro beads are currently used.
- End the use of single-use products, in particular plastic items such as carrier bags and disposable cutlery and bottles wherever possible.
- Improve waste water treatment facilities to tackle sewage related items, and work towards ending the input of marine litter through storm water overflows.
- Charge higher fines for litter offences on land and at sea.
- Implement extended producer responsibility schemes and compulsory marking for fishing gear, to end gear dumping and minimise the presence of ghost nets in European seas.
- Encourage fishing for litter initiatives following the KIMO model, with fished waste accepted at all EU ports and harbours as part of the 100% indirect fee system.
- Develop harmonised and regionally coordinated monitoring schemes for marine litter and its impact.
- Provide funding for research to close the knowledge gaps related to marine litter: including sources, pathways, and effects on ecosystems and organisms.
- Promote beach clean-ups and educational programmes, to increase public awareness of marine litter.

# 8 Descriptor 11 – Underwater noise

**Descriptor 11:** Introduction of energy, including underwater noise, is at levels that do not adversely affect the marine environment.

## 8.1 Background

Many marine mammals and fish rely on sound for locating food, communicating, finding mates, protecting themselves, orientating and navigating. This vital importance of sound for marine biodiversity is why noise can be so problematic. A growing body of scientific research confirms that anthropogenic noise can induce various adverse effects in fish, marine mammals and other marine life (including crustaceans and cephalopods), ranging from disturbance or displacement to body abnormalities, physical injury and death.

The MSFD, as well as other legislative frameworks, such as the EU Habitats Directive, make clear that marine life should not be adversely affected and that nothing should prevent Member States from acting straight away to reduce noise and setting measurable targets.

The wider international community has repeatedly expressed its concern over underwater noise and has adopted various policies at regional and international level, including a number of Multilateral Environmental Agreements (MEAs) and international organisations – to which most Member States of the European Union are signatories.

The Convention on Biological Diversity (CBD) and the Convention on Migratory Species (CMS) both have provisions for underwater noise. The main related regional instruments are the Agreement on the Conservation of Cetaceans in the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS), the Agreement on the Conservation of Small Cetaceans in the Baltic, North East Atlantic, Irish and North Seas (ASCOBANS), and the International Whaling Commission. In addition, the International Maritime Organisation (IMO) has produced a guidance document on reducing shipping noise.

Core aspects of decisions and sets of actions adopted by MEAs and international organisations include:

- promotion of best environmental practice<sup>32</sup>;
- application of best available technology and development of less invasive technology<sup>33</sup>;
- development of guidelines and implementation of relevant measures to ensure a reduction of man-made underwater noise<sup>34</sup>;

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<sup>32</sup> CBD, Decision 18

<sup>33</sup> CMS, Resolution 10.24

<sup>34</sup> CMS Resolution 10.24; IMO Guidelines for the Reduction of Underwater Noise from Commercial Shipping to Address Adverse Impacts on Marine Life, 2014

- Environmental Impact Assessments (EIA) to be carried out and take full account of anthropogenic noise activities,<sup>35</sup> and
- development of proper management plans for marine protected areas, including the designation of no-activity and buffer-zones.<sup>36</sup>

Within the Marine Strategy Framework Directive (MSFD), Member States must ensure that any introduction of underwater noise is at levels that do not adversely affect the marine environment<sup>37</sup>. In 2010 the European Commission defined two criteria for underwater noise, i.e.

- Criterion 11.1.1 'low and mid frequency impulsive sounds' - including noise from seismic surveys, pile-driving, explosions, some sonar systems and some acoustic deterrent devices;
- Criterion 11.2.1 'continuous low frequency sound'.

A Technical Subgroup on Noise (TSG Noise) was established in 2011 to develop the indicators and to provide guidance to member states on monitoring of underwater sound. The overall aim was to measure the cumulative pressure on the environment from all noise sources so that targets could be set and appropriate management action taken to achieve a Good Environmental Status (GES).

Many of the activities generating impulsive sounds (Criterion 11.1.1) are subject to regulation, thus data should be available on when and where these sounds are generated. The **TSG Noise therefore recommended establishing a register of the occurrence of all such sounds.**<sup>38</sup>

## 8.2 Targets proposed by NGOs

The Commission's Article 12 report<sup>39</sup> on the first phase of MSFD implementation noted that not all Member States had defined GES for Descriptor 11. Only two Member States had quantified the proportion of their assessment area affected by noise pressures but these quantifications were not based on the same criterion. No Member State had provided a clear conclusive judgment on whether the current level of the pressure or its impacts was acceptable.<sup>40</sup> Targets proposed by Member States till date lack in ambition and are not measurable.

NGOs propose the following targets:

- a regional analysis of the data in the register indicates both a smaller total area affected by intense noise sources and a decrease in the duration of time that the total area is affected between 2015 and 2020;
- trends in ambient noise levels in areas heavily affected by shipping show a decline between 2015 and 2020;

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<sup>35</sup> *ibid*

<sup>36</sup> Resolution 10.24 COP 10 of the Convention on Migratory Species

<sup>37</sup> [http://ec.europa.eu/environment/marine/good-environmental-status/descriptor-11/index\\_en.htm](http://ec.europa.eu/environment/marine/good-environmental-status/descriptor-11/index_en.htm)

<sup>38</sup> Van der Graaf AJ et al. (2012). European Marine Strategy Framework Directive - Good Environmental Status (MSFD GES): Report of the Technical Subgroup on Underwater noise and other forms of energy.

<sup>39</sup> [http://ec.europa.eu/environment/marine/eu-coast-and-marine-policy/implementation/reports\\_en.htm](http://ec.europa.eu/environment/marine/eu-coast-and-marine-policy/implementation/reports_en.htm)

<sup>40</sup> see <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52014SC0049>

- an analysis of the utilised, applied and developed technologies shows a consistent reduction of source levels.

## 8.3 Measures proposed by NGOs

Noting the increasing concerns about both short- and long-term negative consequences of underwater noise activities for marine biodiversity, there is an imperative need for Member States to apply the precautionary principle in any case of scientific uncertainty.

**Therefore, we call on policy makers:**

- to focus on improving the current situation through precautionary management and mitigation measures to reduce underwater noise pollution at source;
- to identify exclusion zones for impulsive sound activities, including the designation of buffer-zones;
- to ensure that Member States engage in a precautionary and practical approach, setting targets within the MSFD for demonstrating an improving trend in underwater noise pollution.

Governments need to improve the current situation by expanding on existing measures and by developing new measures to prevent and mitigate negative impacts by underwater noise activities. NGOs propose the following measures:

### 8.3.1 Develop specific measures to address underwater noise at source

***Shipping:***

- Promotion and apply the recently agreed voluntary IMO guidelines.
- Develop, via IMO, goal-based standards for reducing the noise levels of new ships.
- Set up action to identify the noisiest existing ships and apply appropriate quieting technologies.
- Set up action and give incentives to ensure the environmental benefits<sup>41</sup>, including reductions in underwater noise, as a result of slow steaming are maintained.

***Seismic surveys:***

- Use the lowest possible source levels and reduce the number of surveys undertaken to the minimum possible by avoiding overlap and duplication in surveys.
- Only grant licenses to operators that clearly demonstrate that using alternative technologies to reduce source levels has been explored.
- Compile a register of all seismic data. Data sharing of the seismic survey after 2 to 5 years shall become a condition for licensing.

***Industrial construction activities (e.g. pile driving):***

- Set noise limits, such as the ones set by Germany which have proven to be effective as a starting point for developing noise reduction technologies.

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<sup>41</sup> note: Apart from significantly reducing shipping noise, this would at the same time have benefits with regard to other environmental pressures, such as whale strikes, climate change and air pollution.

- Encourage alternative technologies throughout planning and licensing, e.g. floating and gravity based wind turbines instead of pile driving.

### **8.3.2 Identify and designate exclusion zones where intense sound production is prohibited**

- Make particularly biologically diverse and important areas off-limits to loud noise sources, including seismic and military sonar, through protection measures for at-risk species, such as time-area closures.

### **8.3.3 Implement a precautionary and practical approach, setting targets within the MSFD for an improving trend in underwater noise pollution**

- Set noise limits should to require all developments to use best environmental practices and technologies.
- Apply Strategic Environmental Assessment and Environmental Impact Assessment to all plans and activities likely to generate significant underwater noise pollution. These assessments should include public participation and develop a consistent and unified procedure addressing the specific nature of underwater noise including long distance propagation. Available guidelines, such as the “Guidelines to address the impact of anthropogenic noise on cetaceans in the ACCOBAMS area”, should also be utilised.
- Establishing a transparent and comprehensive register of intense sound sources (as recommended by TSG noise), including military sources to the extent possible as well as activities in the planning stage.

# 9 Priorities for public participation and consultation

Public participation is a key prerequisite in the Marine Strategy Framework Directive (MSFD) and if conducted properly, it will substantially contribute to the overall effectiveness and success of the Directive. The backbone of good practice public participation is two-way communication between the competent authorities, stakeholders and the public. For the Programmes of Measures (PoMs) active involvement is particularly important since it will help to enhance the effectiveness of their implementation. Trust, transparency of process and good management of expectations will help to achieve good participation. The benefits with regard to improved decision making and the acceptance by the public of measures to be taken can be considerable.

A 2012 survey of NGO experiences with national public consultation processes for the first implementation phase of the MSFD (Article 8, 9 and 10 reports) brought to light several shortcomings<sup>42</sup>. NGOs highlighted problems with the timing of the public participation (too late), the duration of the consultation period (too short), the type of information provided (too technical and voluminous, fragmented or not well structured, etc.), the consultation method (too passive) and the lack of feedback as to how the results of the consultation had been taken into account. Often the processes lack the coherence and transparency needed to have a meaningful input to policy and management.

Public participation in general is however a process of which no blueprint exists; it needs to be tailored to national, regional and local circumstances. For the benefit of the results it can be wise to look further than minimum requirements.

## 9.1 MSFD requirements for public participation and consultation

Early and effective public and stakeholder participation is an integral element of the ecosystem based approach which is to be applied throughout the implementation of the MSFD. Such participation is vital as it facilitates the process of active learning amongst decision-makers and stakeholders and contributes to more successful, enduring and sustainable solutions and outcomes by early identification of public concerns. Effective public participation leads to improved accountability and transparency in decision-making, a wider acknowledgement of the legitimacy of decisions taken and increased public support for, and engagement in, the outcomes and management decisions made.

It is important to ensure that the public participation and consultation processes are fully compliant with the rights guaranteed by the three pillars of the Aarhus Convention, i.e. access to information, public participation in decision-making and access to justice in environmental matters<sup>43</sup>. The Convention provides for public participation in the preparation, modification or review of "plans and

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<sup>42</sup> Seas At Risk, 2012, Implementation of the MSFD: results of an ESEC survey on NGO experiences.

[http://www.seas-at-risk.org/1images/ESEC%20questionnaire%20results\\_1.pdf](http://www.seas-at-risk.org/1images/ESEC%20questionnaire%20results_1.pdf)

<sup>43</sup> <http://ec.europa.eu/environment/aarhus/>

programmes relating to the environment". It also enables environmental NGOs meeting certain criteria to request an internal review under environmental law of acts adopted, or omissions, by Community institutions and bodies (see Box 1).

Three main forms of public participation are included in the MSFD (see also Box 2):

- Active involvement in the implementation of the Directive and at all scales (sub marine region scale and national level), and at the three implementation steps of the directive, i.e. 1) initial assessment, description of good environmental status, identification of targets and indicators, 2) development of monitoring programmes and 3) development of programmes of measures.
- Consultation on each of the three steps of the implementation process, i.e. giving the public the opportunity to react to the proposals (e.g. draft PoM) developed by the competent authorities.
- Access to background information.

The MSFD (Art. 19 (1)) stipulates that the public are to be provided with 'early and effective opportunities to participate' in the implementation of the directive. In support of this, Article 19(2) requires Member States to publish and make available to the public for comment, summary draft documents for all key stages of MSFD implementation, including the programmes of measures.

Preamble 36 of the Directive states that 'To ensure the active involvement of the general public in the establishment, implementation and updating of marine strategies, provision should be made for proper public information on the different elements of marine strategies, or their related updates, as well as, upon request, relevant information used for the development of the marine strategies in accordance with Community legislation on public access to environmental information.'

'Stakeholder involvement' is also specifically cited as one of only eight selected indicative measures which are set out in Annex VI and which must be taken into consideration in the drawing up of the Programme of Measures.

In addition to the MSFD, there are other important requirements on public participation embedded in other EU legislation,

- Directive 2003/4/EC on public access to environmental information.
- Directive 2003/35/EC on public participation when drawing up certain plans and programmes relating to the environment.
- The Strategic Environmental Assessment (SEA) Directive – which requires an assessment of certain plans and programmes and which in most cases will apply to the PoMs as well.

## 9.2 Measures proposed at national level

The sections below line out public participation good practice 'rules' NGOs would like to see implemented throughout the MSFD implementation and the PoMs in particular. These draw amongst other on the Guidance for public participation that was developed for the Water Framework Directive<sup>44</sup> and on feedback received from NGOs.

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<sup>44</sup> European Commission, 2003, Guidance document N8 - Public Participation in relation to the Water Framework Directive

## 9.2.1 Foster active involvement of stakeholders and the public

Active involvement means that stakeholders actively participate in the planning process by discussing issues and contributing to their solution. Essential to active involvement is the potential for participants to influence the process.

- Recognise the role of stakeholders in assisting with delivery of MSFD implementation as e.g. laid out in the PISCES guide<sup>45</sup> for each step of MSFD implementation.
- Engage with stakeholders early in the process, i.e. at the start of the development of the PoM and ensure that the public can express comments and opinions when all options are open before decisions on the programmes are made. It is never too early!
- Identify and include all stakeholders and make clear the parameters of engagement, i.e. make clear which form of public participation is dealt with and what the role of those involved is.
- Plan ahead to ensure that stakeholders have the capacity to participate when the opportunity is provided. Develop a roadmap /notebook integrating the outcomes of each step, the public and experts feedbacks.
- Encourage active involvement at all scales where activities take place to implement the Directive.
- Invite stakeholders to national government meetings and workshops.
- Foster the exchanges between all kind of stakeholders (industry, fishermen, NGOs, ...)
- Appoint dedicated staff to facilitate and provide continuous support for public participation in MSFD implementation and involve specially trained professionals to facilitate the process.
- Use appropriate means and techniques to involve interested parties at all levels, i.e.
  - Establish an e-forum/platform (e.g. an interactive platform using both web resources and physical meetings) aiming at fostering exchanges among the public and at enhancing the content and form of public participation throughout the implementation of MSFD.
  - Establish statutory Stakeholder Advisory or Management Councils at national level (linked with existing local committees working on MSFD) with clear terms of reference explaining the mechanisms through which it can influence decisions.
  - Set up transnational, multi-sector forums at sub regional level to foster greater communication, cohesion and integration across borders and sectors (e.g. the LIFE+ Celtic Seas Partnership project).
  - Use multiple public participation methods, i.e. focused dialogue with individual stakeholders, multi-sector forums, bilateral meetings, steering groups, advisory groups, workshops and meetings to generate solutions and define measures.
  - Organise thematic trainings (capacity building) aiming at providing information to develop common understanding and deepening the reflection.

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<sup>45</sup> [www.projectpisc.es.eu/guide](http://www.projectpisc.es.eu/guide)

## 9.2.2 Organise effective consultation

The MSFD foresees formal consultation periods for on the Article 8, 9 and 10 reports (initial assessment, description of good environmental status, targets and indicators), the monitoring programme and the PoM. It does however not suffice to announce the consultation period once and put the document for viewing on a website. It is important that participation in the consultation is activated by multiple methods and through various communication channels. High level support by the government is key for a well-managed participation.

- Underpin the public consultation by a firm commitment by government, e.g. by profiling and communicating it as a national core event.
- Use various channels of communication to inform the public about the consultation and activate participation e.g. through information meetings, online discussion fora, direct engagement with NGOs and industry associations.
- Ensure the consistency with other public participation processes (such as the Water Framework Directive).
- Provide sufficient time for the consultation period, e.g. 3 months seems a minimum, given the complexity of the issues.
- In making decisions on the PoM, take due account of the results of the public consultation.
- Inform the public about the decisions taken (i.e. the PoM that has been adopted), including a statement summarising how the opinions expressed and the results of consultations have been taken into account (or not).

## 9.2.3 Access to information

Active dissemination of information is essential to make the prescribed consultation and active participation effective.

- Keep a list of available information with key elements for enabling the information take-up.
- Assign one central information or knowledge centre responsible for information management and dissemination.
- Actively disseminate environmental information, including the draft PoM, the cost effectiveness analysis, Impact Assessment and strategic environmental assessment (if applicable).
- Ensure that information is tailored to the various target groups, i.e. include summaries as well as more detailed information.
- Include an overview of exceptions (as defined under Article 14.1 and 14.4) in the PoM and the public consultation with an explanation on how these were identified.

## 9.3 Measures proposed at EU and regional seas level

At the EU and regional sea level, Commission and the Regional Seas Convention should:

- Lead the way in encouraging citizen engagement in marine matters, by actively raising awareness of pressures on the marine environment and the role of the MSFD, e.g. by setting through a public awareness campaign, involving social media, local media and community groups and NGOs.

- Develop good practice guidance and facilitate exchange of experiences on public participation in the context of the MSFD by organising e.g. European and regional workshops.
- Draw upon key examples of effective stakeholder engagement at sub-regional scales (e.g. the LIFE+ Celtic Seas Partnership project) and consider opportunities to apply lessons learned across Europe's seas.
- Evaluate public participation processes and bring these to the agenda of the Marine Strategy Coordination Group and the RSCs.
- Make a publically accessible internet portal in order to link work of the countries, RSCs and the EU and with all information in relation to the implementation of the MSFD and related marine planning.
- Make publicly available all relevant information regarding the 'coherent and representative network of marine protected areas' in order to inform stakeholder participation in site designation.

### **Box 1: The Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters**

This United Nations Economic Commission for Europe (UNECE) Convention was adopted at the Fourth Ministerial Conference as part of the "Environment for Europe" process. It entered into force on 30 October 2001.

The Aarhus Convention establishes a number of rights of the public (individuals and their associations) with regard to the environment. The Parties to the Convention are required to make the necessary provisions so that public authorities (at national, regional or local level) will contribute to these rights to become effective. The Convention provides for:

- the right of everyone to receive environmental information that is held by public authorities ("**access to environmental information**"). This can include information on the state of the environment, but also on policies or measures taken, or on the state of human health and safety where this can be affected by the state of the environment. Applicants are entitled to obtain this information within one month of the request and without having to say why they require it. In addition, public authorities are obliged, under the Convention, to actively disseminate environmental information in their possession;
- the right to participate in environmental decision-making. Arrangements are to be made by public authorities to enable the public affected and environmental non-governmental organisations to comment on, for example, proposals for projects affecting the environment, or plans and programmes relating to the environment, these comments to be taken into due account in decision-making, and information to be provided on the final decisions and the reasons for it ("**public participation in environmental decision-making**");
- the right to review procedures to challenge public decisions that have been made without respecting the two aforementioned rights or environmental law in general ("**access to justice**")

Source: <http://ec.europa.eu/environment/aarhus/>

**Box 2: MSFD - Article 19 - Public consultation and information**

1. In accordance with relevant existing Community legislation, Member States shall ensure that all interested parties are given early and effective opportunities to participate in the implementation of this Directive, involving, where possible, existing management bodies or structures, including Regional Sea Conventions, Scientific Advisory Bodies and Regional Advisory Councils.

2. Member States shall publish, and make available to the public for comment, summaries of the following elements of their marine strategies, or the related updates, as follows:

(a) the initial assessment and the determination of good environmental status, as provided for in Articles 8(1) and 9(1) respectively;

(b) the environmental targets established pursuant to Article 10(1);

(c) the monitoring programmes established pursuant to Article 11(1);

(d) the programmes of measures established pursuant to Article 13(2).

3. With regard to access to environmental information, Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information (23) shall apply.

In accordance with Directive 2007/2/EC, Member States shall provide the Commission, for the performance of its tasks in relation to this Directive, in particular the review of the status of the marine environment in the Community under Article 20(3)(b), with access and use rights in respect of data and information resulting from the initial assessments made pursuant to Article 8 and from the monitoring programmes established pursuant to Article 11.

No later than six months after the data and information resulting from the initial assessment made pursuant to Article 8 and from the monitoring programmes established pursuant to Article 11 have become available, such information and data shall also be made available to the European Environment Agency, for the performance of its tasks.

Source: Marine Strategy Framework Directive [http://ec.europa.eu/environment/marine/eu-coast-and-marine-policy/marine-strategy-framework-directive/index\\_en.htm](http://ec.europa.eu/environment/marine/eu-coast-and-marine-policy/marine-strategy-framework-directive/index_en.htm)

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