

Q&A – Implementation report of the Marine Strategy Framework Directive

How does the EU protect the marine environment?

The European Union boasts a framework that requires EU Member States to develop strategies to achieve 'good environmental status' in their marine waters by 2020. This objective aims at having clean, healthy and productive seas. This framework is set through a legal instrument known as the "Marine Strategy Framework Directive" (Directive 2008/56/EC).

What is a marine strategy?

In order to achieve 'good environmental status', each Member State was required to develop a strategy for its marine waters (or Marine Strategy). In addition, because the Directive follows an adaptive management approach, the Marine Strategies must be kept up-to-date and reviewed every 6 years.

In their marine strategies, Member States must:

- (1) Assess the status of their marine waters, the pressures they are subjected to and their impacts, as well as socio-economic impacts;
- (2) Determine good environmental status for (a) pressures on the marine environment (e.g. non-indigenous species, fisheries, eutrophication, etc.) and (b) state of the marine environment (e.g. biodiversity, etc.);
- (3) Establish targets to achieve good environmental status;
- (4) Set up and implement monitoring programmes;
- (5) Set up and implement programmes of measures.

Over the first six years of implementation EU Member States had to assess the status of their marine waters; determine 'good environmental status' on the basis of 11 descriptors (such as biodiversity, commercial fisheries, marine litter or seabed integrity); set targets, develop and implement monitoring programmes; and finally develop and implement measures to achieve this objective. The ecosystem approach to the management of human activities having an impact on the marine environment is intrinsic to the framework, thereby integrating the concepts of environmental protection and sustainable use. Importantly, this framework requires Member States to work together in a regional context, thereby ensuring coherence in the actions that are being taken by Member States given the transboundary nature of impacts on the marine environment. EU Member States therefore often work together with the four Regional Sea Conventions covering the marine waters of EU Member States. This report covers the first implementation cycle of the Directive.

How EU Member States develop marine strategies



What is targeted in the marine strategies?

The strategies revolve around these 11 'descriptors', which EU Member States use to determine 'good environmental status' and for which specific monitoring programmes and measures are defined:

- Biodiversity is maintained
- Non-indigenous species do not adversely alter the ecosystem
- The population of commercial fish species is healthy
- Elements of food webs ensure long-term abundance and reproduction
- Eutrophication is minimised
- The sea floor integrity ensures functioning of the ecosystem
- Permanent alteration of hydrographical conditions does not adversely affect the ecosystem
- Concentrations of contaminants give no effects
- Contaminants in seafood are below safe levels
- Marine litter does not cause harm
- Introduction of energy (including underwater noise) does not adversely affect the ecosystem

How to achieve good environmental status for these 11 descriptors are further detailed in [Commission Decision 2017/848/EU](#).

How is good environmental status determined?

Good environmental status needs to be determined at the level of the marine region or subregion, on the basis of the qualitative descriptors in Annex I of the Marine Strategy Framework Directive.

The Commission Decision on good environmental status of marine waters (2017/848/EU) contains a number of criteria and methodological standards for determining good environmental status, in relation to the 11 descriptors of good environmental status laid down in Annex I of the Marine Directive. The Decision also contains specifications and standardised methods for monitoring and assessing marine waters. The Decision is a major stepping stone to establish precise objectives for the achievement of GES within the implementation of the MSFD, thereby providing a picture of the extent to which good environmental status is achieved in the EU's seas and oceans.

It replaces a previous legal instrument from 2010, which was found by the Commission in its 2014 report to have produced incoherent outcomes in determining good environmental status across the EU.



What has been done so far?

This report closes and assesses the first cycle of implementation of the Marine Strategy Framework Directive. In 2012 Member States reported, for the first time ever, on the state of the environment in their marine waters (Article 8), on what they consider as being a "good environmental status" (Article 9) and on the objectives and targets (Article 10) they have set themselves to reach it by 2020. The Commission 2014 assessment showed that more efforts were urgently needed if the EU is to reach its 2020 goal.

The Commission's 2017 report assessed Member States' monitoring programmes submitted by most Member States in 2014 and 2015 to verify compliance with the Directive. The report and its accompanying Staff Working Document contain the Commission's findings and provides guidance on changes needed, globally and for each Member State, including per descriptor.

The Commission's 2018 assessment on the programmes of measures noted that while Member States made considerable efforts to address pressures on the marine environment, the measures were not yet sufficient to achieve good, healthy and productive seas by 2020. The Commission once again provided guidance to Member States.

The Commission reports, accompanied by detailed annexes and technical support documents per Member State and per descriptor for each of these steps are all available here –

https://ec.europa.eu/environment/marine/eu-coast-and-marine-policy/implementation/reports_en.htm

The second cycle started again with Member States now updating their strategies in 2018 by re-assessing the state of the marine environment, their 'good environmental status' and their targets. This next cycle should shed some initial light on what has been achieved in real terms.

What has the Marine Strategy Framework Directive achieved?

The Marine Strategy Framework Directive has led to a holistic assessment, and subsequent action, of all marine issues. Thanks to the Directive, we now have a better understanding of the status of marine waters than we know prior to the Directive came into force. The EU now also has marine strategies for each marine region, comprising comprehensive monitoring plans and measures. It has triggered the need for research in areas that were previously underestimated, such as marine litter (which resulted contributed to the adoption of the Single-Use Plastics Directive), underwater noise and seabed habitats. Through the Marine Strategy Framework Directive, Member States have progressively moved from a piecemeal approach to protecting the marine environment to a strategic approach, by bringing together various work-strands. The Marine Strategy Framework Directive is a key pillar for the EU to deliver on its global commitments to protect the marine environment and develop a sustainable approach to ocean management, as recognised in the EU's international ocean governance initiative.

Who is responsible for making sure that the rules are correctly implemented?

The key responsibility for ensuring effective implementation and enforcement of the measures stemming from the Marine Strategy Framework Directive lies with national authorities. Member states have designated the authority or authorities competent for the implementation of this Directive pursuant to Article 7.

What is the state of European seas?

This cannot be determined precisely yet as the data reflecting a 2020 snapshot to be reported by Member States will be due in 2024. The data reported so far was reported in 2018, meaning it reflects the situation in 2016 or 2017. Nevertheless, from the information reported so far, other sources and certain assumptions, it is clear that Good environmental Status has not been achieved in all European waters across all the 11 descriptors. This is due to a number of factors. Firstly, the so far incoherent determinations of Good Environmental Status means that we do not have comparable quality standards. Secondly, the strategies are not always ambitious enough to sufficiently address the pressures that the seas and ocean are subjected to. Thirdly, in certain instances the sea is slow to recover even if the right measures are applied, For example, within the same habitat some species recover more quickly than others. Fourthly, some problems have been there for decades on end. With measures only kicking in under the MSFD at best in 2016, it is difficult to even

imagine that the recovery would be so swift (e.g. certain legacy contaminants or seabed damage). Here are some examples of findings from the report and its annexes:

Descriptor	
Biodiversity is maintained	<p>Marine ecosystems are under threat.</p> <ul style="list-style-type: none"> • <i>Baltic Sea</i>: There only is a population of a few hundred individuals of harbour porpoise. The white-tailed eagles are however recovering. • <i>North-east Atlantic Ocean</i>: The abundance of more than 25% of marine bird species has dropped considerably. Fishing pressure has however decreased and 41% of the assessed fish and shellfish stocks in the North-east Atlantic Ocean and Baltic Sea combined are within safe biological limits. • <i>Mediterranean Sea</i>: around 40% of elasmobranchs are declining. Positive: monk seals populations have stabilised in parts of the Mediterranean Sea. • In the <i>Mediterranean</i> and <i>Black Seas</i> at least 87% of the commercially exploited fish and shellfish species are overfished. • In general, cetacean and reptiles are either in unknown or not good status.
Non-indigenous species	<p>There are over 1,200 marine non-indigenous species in Europe's seas, mostly occurring in the Mediterranean Sea. Roughly 7% of the marine non-indigenous species are potentially invasive. The main pathways for the introductions of such species in Europe's seas seem to be shipping (49%) and marine and inland corridors such as the Suez canal (33%).</p>
Commercial fish	<p>By-catch is supposed to be the main pressure for all of the threatened species of sharks, rays and skates in Europe seas, where 32-53 % of all species are threatened.</p>
Food webs	<p>Some key species or groups of species in EU marine regions are showing signs of recovery. Despite this, there are many examples of trophic guilds showing deteriorating trends over time, affected by anthropogenic pressures. This especially concerns the reduction in abundance of several top predators, such as birds, sharks and marine mammals.</p>
Eutrophication	<p>46% of the European coastal waters is failing to meet good status. However, the extent of the areas affected is decreasing.</p>
Seabed integrity	<p>About 79% of Europe's coastal seabed and 43% of shelf/slope area is considered to be physically disturbed, mainly caused by bottom trawling.</p>
Hydrographical conditions	<p>28% of EU's coastline is affected by permanent hydrographical changes, including seawater movement, salinity or temperature. 31% of the area of coastal water bodies are in high or good hydromorphological quality status, but 67% is unknown.</p>
Contaminants	<p>EU and global legal instruments to combat chemical pollution has led to a reduction of their concentrations</p>

	in marine waters, leading to less impacts of some hazardous substances in the marine environment. However, some areas still show high concentrations of heavy metals, persistent organic pollutants or radioactive isotopes.
Contaminants in seafood	Certain fish and fishery products from the Baltic Sea regularly exceed the maximum limits of dioxins.
Marine litter	<ul style="list-style-type: none"> - The accumulation of plastics and plastic chemical residues in most of the marine species, including fish and shellfish products, is a growing risk. - Single-use plastics represent 50% of all European beach litter items and fishing gear containing plastics accounts for another 27%. - 93% of the fulmar birds assessed in the North-east Atlantic Ocean had ingested some plastic, and 85% of the turtles assessed in the Mediterranean Sea had ingested litter.
Energy (including underwater noise)	Maritime traffic is considered the main source of continuous underwater noise . The Mediterranean Sea has the largest area of very high traffic (27% of the sea area). Impulsive underwater noise comes from offshore energy platforms, construction operations or marine research, and likely occurs in 8% of the EU's marine area.

What are the main pressures on our regional seas?

Baltic Sea: eutrophication from excess agricultural nutrients, unsustainable fishing.

North-east Atlantic Ocean: unsustainable fishing, marine litter.

Mediterranean Sea: unsustainable fishing, non-indigenous species, marine litter.

Black Sea: contaminants, unsustainable fishing.

Climate change is of concern for all regions.

What role do the Regional Sea Conventions play?

The Marine Strategy Framework Directive requires Member States to coordinate their strategies at the level of a marine region or subregion. It asks EU Member States to do so in using relevant international forums, including mechanisms and structures of Regional Sea Conventions. The Regional Sea Conventions are themselves separate international agreements, which have contracting parties that half from outside the European Union. Working through the regional Sea Conventions to achieve good environmental status has the benefit of roping in non-EU Member States into achieving similar objectives. Four Regional Sea Conventions cover EU marine waters: (1) The Convention on the Protection of the Marine Environment in the Baltic Sea Area ([HELCOM](#)); (2) The Convention for the Protection of the Marine Environment of the North-east Atlantic ([OSPAR](#)); (3) The Barcelona Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean ([UNEP-MAP](#)); (4) The Convention on the Protection of the Black Sea Against Pollution ([Bucharest Convention](#)). The Union is a contracting party to the first three.

What about other policies protecting European seas and oceans?

Being a framework directive, the Marine Strategy Framework Directive draws initiatives taken under other EU legislation such as the Waste Framework Directive, the Water Framework Directive, the Birds Directive, the Habitats Directive, the Urban Waste Water Treatment Directive, the Nitrates Directive, the Single-Use Plastics Directive, the Common Fisheries Policy Regulation, to name a few. The report highlights the interaction with these policies.

What are the main implementation challenges identified over the first cycle?

In terms of implementing the Directive, the report identifies a number of challenges that would need to be overcome. The report identifies that the notion of Good environmental status in relation to the 2020 deadline has led Member States to determine good environmental status in a less ambitious way than expected. With regards to the efforts to achieve good environmental status, while Member States have put many measures in place (see COM(2019)562final), the effectiveness of these measures remains largely unknown. This means that Member States are not able to tell by how much will the measures contribute to achieve good environmental status. Given the framework nature of the Directive, the report also recognises the complexity in implementing it. Often, the operational measures to improve the status of the water, or to reduce the impacts of certain human pressures, are managed by other national departments or policies. The reporting timelines of the Directive have also been difficult to manage, where Member States have to report every two years on each different step of the MSFD cycle. This has also been riddled with delayed reporting, thereby slowing down the roll-out of the strategies and any remedial action that needs to be applied to these strategies. The reluctance to make better use of e-reporting by Member States and the unavailability and non-comparability of the data reported add to the challenge. Finally, the efforts to reduce the main pressures affecting each region or subregion were not coordinated well enough among riparian Member States.

What else is in the report?

The report is supported by 3 staff working documents. The first one (SWD(2020)60) looks at the various implementation steps and brings together the findings of the Commission throughout the first implementation cycle: the assessment of the state of Member States marine waters, the determination of good environmental status and targets, the setting up of monitoring programmes and the implementation of measures. It also provides information on EU-funded projects that supported the implementation of the MSFD, as well as the use of spatial measures (such as marine protected areas) in the MSFD context. The second document goes into further detail on the state of the marine environment for each of the MSFD descriptors, based on information provided by the European Environment Agency (see the EEA's marine messages II, also published today), as well as the Commission's Joint Research Centre. The third document (SWD(2020)62) looks at some cross cutting issues in relation to particularly the use of the Commission Decision (EU)2017/848 in Member State's determinations of GES under Article 9 and for assessments under Article 8 of the Marine Strategy Framework Directive.

What is the follow-up to this report?

This report is a legal requirement stemming from the Directive. The report will pave the way for the launch of the review of the Directive, which needs to be completed by 15 July 2023. At the end of this process the Commission shall review this Directive shall, where appropriate, propose any necessary amendments.

For more information - http://ec.europa.eu/environment/marine/index_en.htm