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COMMUNICATION FROM THE COMMISSION

**Commission Notice on recommendations on the 2020 updated reports for Article 11 of
the Marine Strategy Framework Directive (2008/56/EC)**

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1. INTRODUCTION

The Marine Strategy Framework Directive (MSFD, 2008/56/EC)¹ is a holistic legislation. Its objective is to protect the marine environment in Europe, while enabling the sustainable use of marine resources and services. It requires Member States to assess the quality of the marine environment; determine good environmental status; set appropriate environmental targets; draw up adequate monitoring programmes; and implement measures to achieve the Directive's key goal of securing a 'good environmental status' of all EU marine waters by 2020. As pointed out in the Directive's implementation report², this goal was not achieved in all EU waters across all the descriptors³ in the Directive by the given deadline.

[Commission Decision 2017/848](#) lays down criteria and methodological standards for determining good environmental status of marine waters for each MSFD descriptor.

Under the Directive, Member States are asked to report the various steps of their marine strategies to the European Commission, to assess the state of their seas, determine good environmental status and set targets. Member States must also set up and implement monitoring programmes and take measures to achieve or maintain good environmental status. In particular, according to Articles 11 (1) and 17(4) of the Directive, Member States were expected to notify their updated monitoring programmes to the Commission by 15 July 2020. Through the MSFD Common Implementation Strategy⁴, Member States agreed to transmit such monitoring programmes in the form of e-reports with relevant structured information via WISE-Marine platform.

However, the majority of Member States did not submit reports by the deadline. Despite the Commission's reminders about their reporting obligations, reports were still missing from four Member States by January 2022. These late submissions resulted in delays in the assessment of the monitoring programmes, which the Commission is required to perform under Article 12 of the Directive.

This report is based on the monitoring programmes submitted by the January 2022 cut-off date by 18 of the 22 Member States with a marine border (Belgium, Denmark, Germany,

¹ Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive) (OJ L 164, 25.6.2008, p. 19).

² COM/2020/259 final.

³ The 11 qualitative descriptors are defined in Annex I of the Marine Strategy Framework Directive and further specified in Commission Decision 2017/848/EU. They include: D1 – Biodiversity; D2 – Nonindigenous species; D3 – Commercial fish and shellfish; D4 – Food webs; D5 – Eutrophication; D6 – Sea-floor integrity; D7 – Hydrographical changes; D8 – Contaminants; D9 – Contaminants in seafood; D10 – Litter; D11 – Energy, including underwater noise.

⁴ https://ec.europa.eu/environment/marine/eu-coast-and-marine-policy/implementation/index_en.htm

Estonia, Ireland, Spain, France, Croatia, Italy, Cyprus, Latvia, Lithuania, Netherlands, Poland, Romania, Slovenia, Finland, Sweden). The analysis and Commission assessment for countries that submitted reports after January 2022 (Greece, Portugal, Bulgaria) and for countries that have not yet sent their reports (Malta⁵) will follow once all national reports have been received. As guardian of the Treaties, the Commission reserves its right to pursue cases of non-compliance through the legal means at its disposal.

Based on the technical and scientific analysis⁶ of the national reports provided by the Commission's Joint Research Centre (JRC) – published simultaneously to this report – the Commission has drawn a number of EU-wide recommendations. They focus on Article 11 and on the descriptors included under Annex I of the Directive, together with the criteria identified in Commission Decision (EU) 2017/848⁷.

While carrying out its assessment, the Commission considered the following four main elements listed below.

1. What is actually monitored, at what frequency and where.
2. Whether the data collected is sufficient and useful to properly assess the state of the sea, the effects of the measures taken and the attainment of good environmental status.
3. Regional coherence of the monitoring programmes.
4. Policy coherence with other EU reporting obligations – in particular, waste and water framework directives; common fisheries policy; single use plastics; habitats and bird directives.

The JRC's analysis provides detailed information on what each Member State reported and highlights national shortcomings. Where possible, it makes a comparison with the 2014 monitoring programmes, in particular on the fulfilment of Member States' 2014 commitments.

The aim of the analysis is to lay out all necessary elements and guide each Member State to take appropriate follow-up actions in line with Article 12 of the Directive. This will enhance compliance when reporting monitoring programmes across the EU.

Comprehensive and coherent monitoring data are necessary to understand the impacts of human pressures on the marine environment, as well as to assess how effective various measures are in reducing these pressures thereby contributing to healthy seas and coasts, and, more broadly, to the implementation of the European Green Deal. In this respect, the recently adopted [Zero Pollution Monitoring and Outlook Report](#)⁸, in addition to underlining slow progress in the marine environment notably in relation to the prevention of excess nutrients

⁵ Malta had not reported by 22 February 2023.

⁶ Tornero V., Palma M., Boschetti S.T., Cardoso A.C., Druon J.-N., Kotta M., Louropoulou E., Magliozzi C., Palialexis A., Piroddi C., Ruiz-Orejón L.F., Vasilakopoulos P., Vighi M., Hanke G. Review and analysis of EU Member States' 2020 reports: Monitoring programmes (MSFD Article 11), EUR 31181 EN, Publications Office of the European Union, Luxembourg, 2022, ISBN 978-92-76-55778-4, doi:10.2760/8457, JRC129363

⁷ Commission Decision (EU) 2017/848 of 17 May 2017 laying down criteria and methodological standards on good environmental status of marine waters and specifications and standardised methods for monitoring and assessment, and repealing Decision 2010/477/EU, OJ L 125, 18.5.2017, p. 43-74.

⁸ COM(2022) 674 final, Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the regions on the First 'zero pollution' monitoring and outlook for 'Pathways towards cleaner air, water and soil for Europe'

and plastic litter in the seas, clearly identified the lack of sufficient and reliable data as an obstacle to follow-up on the implementation of some of the targets set.

2. OBSERVATIONS AND RECOMMENDATIONS

2.1 *General observations and recommendations*

The assessment showed that only a small proportion of Member States reported new monitoring programmes⁹. In fact, one third of the monitoring programmes remained the same as in the 2014 reporting cycle. In the majority of cases, Member States mainly reported modifications or updates of their 2014 monitoring programmes. The pattern was the same for each descriptor.

Based on the above, the Commission has drawn the general observations and recommendations listed below.

- **Some Member States have not reported monitoring programmes for some descriptors**¹⁰. The Commission invites the Member States concerned to update and report the missing data without delay.
- **The data reported for the various elements and parameters lack consistency across Member States**, making any comparison or assessment of monitoring methods and programmes very difficult. Moreover, some Member States reported several features, elements or parameters that are not strictly related to the reported descriptor. The Commission underlines that consistent reporting per descriptor across Member States is key for the analytical process¹¹.
- **The criteria**¹² **to be reported were not covered consistently**; only eight criteria (all primary)¹³ out of 42 (both primary and secondary) are reported by all Member States. More generally, the coverage for primary criteria seems to be higher than that for

⁹ See p.174 of JRC analysis.

¹⁰ Reporting for descriptor 9 is missing for Germany; reporting for descriptor 1 on birds is missing for Romania; reporting for descriptor 4 is missing for Germany and Romania. Although Belgium, Ireland, France, Cyprus, and Latvia provided reports for descriptor 4, they did not do so for any of its criteria, but reported for other descriptor criteria (mainly descriptor 1). This is mostly because there is no monitoring for descriptor 4. For this descriptor Member States rely on data coming from other descriptors' monitoring programmes.

¹¹ Reporting on the MSFD needs to consider reporting for the features (e.g. ecosystem components, pressures, activities), elements (e.g. specific species, habitats, contaminants, litter categories) and parameters monitored, as stated in the monitoring reporting guidance (MSFD guidance document 17).

¹² As identified in Commission Decision 2017/848/EU.

¹³ Descriptor 1, criterion 2 (population abundance of selected species); descriptor 3, criterion 1 (fishing mortality rate), descriptor 3, criterion 2 (spawning stock biomass), descriptor 5, criterion 1 (nutrients' concentration), descriptor 8, criterion 1 (contaminants' concentration), descriptor 9, criterion 1 (level of contaminants in edible tissues of seafood), descriptor 10, criterion 1 (macro litter quantities and composition) and descriptor 11, criterion 1 (anthropogenic impulsive sound in water).

secondary criteria¹⁴. However, this depends on the descriptor being monitored. The Commission reminds Member States that in principle all criteria should be covered in the monitoring programmes.

- **Some Member States** (e.g. Denmark, Spain, Sweden) **reported (sub) regions** (e.g. Northeast Atlantic, Baltic) **in a combined way, preventing a regional analysis from being carried out**. The Commission urges Member State to avoid such an approach in future reporting rounds.
- **Links to monitoring data are provided but the number and accessibility of links varies significantly among Member States**. For instance, the original data (and metadata) are hard or impossible to access for some Member States as the links provided under ‘Data Access’ are not connected to a specific dataset or need additional steps to find, access and reuse the data. Such links are necessary for transparency, accessibility and for enabling joint efforts. The Commission invites Member States to verify the access and the quality of the links provided to access the monitoring data. Experience shows that processes such as EMODNET for the compilation of harmonized, comparable, datasets across the EU can support a data-based large-scale overview; it might therefore be advisable to further consider the development of such processes.
- The considerable discrepancy and type of information reported by the Member States for some descriptors indicate that personnel of **national competent authorities need to be familiar with the reporting guidelines and the use of the recommended formats** of the MSFD Common Implementation Strategy¹⁵. The Commission has already presented capacity-building possibilities for MSFD reporting to Member States’ administrations through its technical assistance and information exchange (TAIEX) instrument, such as ‘peer to peer’ projects. The Commission invites Member States to consider this option in the future.

2.2 Links with Article 8 of the Directive (Assessments of state), Article 9 (Determining good environmental status), Article 10 (Environmental targets) and Article 13 (Measures)

The analysis showed that most monitoring programmes submitted by Member States were designed to cater for pressures at sea and at source¹⁶. They were therefore less suitable to **measure the impacts of those pressures**. Moreover, the analysis highlighted gaps in Member States’ monitoring programmes. Most gaps seem to be linked to the lack of agreed approaches or methodological standards at EU or regional level to assess the different criteria or descriptors.

¹⁴ According to Article 3.2 of Commission Decision 2017/848/EU, secondary criteria are used to complement a primary criterion or when the marine environment is at risk of not achieving or not maintaining a good environmental status for that particular criterion.

¹⁵ <https://circabc.europa.eu/ui/group/326ae5ac-0419-4167-83ca-e3c210534a69/library/bc5bb466-2855-4308-be2e-4a585ee8ba69/details>

¹⁶ See p.95-118 and 175-177 of the JRC analysis.

On the coverage of criteria for **good environmental status**¹⁷, the analysis shows that the monitoring programmes are often incomplete, with wide variations between Member States for each of the descriptors. That said, monitoring programmes are more complete when the MSFD criteria coincide with requirements under other EU legislation. This is the case for commercial fisheries (descriptor 3) under the common fisheries policy or for eutrophication (descriptor 5) under the Water Framework Directive (2000/60/EC). This confirms the lack of sufficiently concrete and coordinated good environmental status determination, already highlighted in the Commission assessment of Member States reports on Articles 8-10¹⁸. In fact, less than 50% of Member States have set quantitative threshold values for good environmental status and less than 25% of Member States have established adequate means to determine a good environmental status for descriptors on biological diversity, non-indigenous species, contaminants, and marine litter.

For all descriptors, a significant number of Member States have indicated that monitoring is not yet adequate to cover their own **environmental targets**. The latest Commission assessment of Member States targets¹⁹ had already shown that there are still many gaps in the setting of common targets because they are defined in a rather general way. For instance, only 30% of Member States set measurable targets for eutrophication and less than 20% do so for all the other descriptors. This means that they cannot all be linked to specific monitoring activities. Therefore, the monitoring programmes cannot address all the targets.

In addition, **the monitoring programmes do not provide sufficient data to assess the progress due to measures**, despite the recommendation made by the Commission in 2017²⁰ and 2018²¹. Many Member States have declared that monitoring is not yet adequate to cover the progress of measures and to gauge their effectiveness. To monitor effectiveness, measures must be specific to the descriptor under review and cannot be generic or broadly related to human activity impacts, as is often the case now.

To conclude, from the information reported, it is difficult to accurately assess the **links with other MSFD reporting obligations** (namely Articles 8, 9, 10 and 13). It seems there are still gaps in understanding (i) which elements/parameters should be monitored to assess good environmental status; (ii) the conceptual approaches to set targets; and (iii) what should be reported for monitoring related to measures.

The Commission would therefore like to underline that consistent and coherent monitoring will only be possible when targets are specific enough and clearly linked to a particular good environmental status criterion. Only then, will it support the implementation of Article 10 and measure progress towards the targets.

2.3 Spatial/temporal scope and monitoring frequency

¹⁷ As envisaged in Commission Decision 2017/848/EU.

¹⁸ Covering assessment of the marine environment (Article 8), determination of good environmental status (Article 9) and environmental targets (Article 10): [C\(2022\)1392 “Commission Notice on recommendations per Member State and region on the 2018 updated reports for Articles 8, 9 and 10 of the Marine Strategy Framework Directive \(2008/56/EC\)”](#)

¹⁹ see footnote 18

²⁰ [COM \(2017\) 3 final](#)

²¹ [COM \(2018\) 562 final](#).

Monitoring efforts mainly focus on coastal waters, suggesting the need for improved monitoring in other underrepresented areas, namely beyond Member States' territorial waters, which are also covered by the scope of the legislation. The Commission recognises the challenges and costs that monitoring out at sea entails. This is why targeted support has been provided through projects financed by EU funds such as the European Maritime Fisheries and Aquaculture Fund (EMFAF) and its predecessor the European Maritime Fisheries Fund (EMFF), regional funding (INTERREG), and Horizon 2020. The Commission recently published a document on funding opportunities to support the environment under the 2021-2027 multiannual financial framework and NextGenerationEU²². The Horizon Europe Mission Restore our Ocean and Waters by 2030 will put in place a digital environmental monitoring system. This system, including the Digital Twin Ocean, the Mission projects and other actions could further assist Member States in improving their marine monitoring capacity.

In short, taking a risk-based approach to monitoring, joining efforts through improved coordination, and making better use of the above mentioned EU funds and opportunities can enhance the territorial scope of Member States' monitoring programmes.

Regarding **monitoring frequency**, the information provided²³ is too broad to reveal any pattern (for example by referring to the whole monitoring programme), notably given the high number of monitoring programmes and the numerous elements and parameters. However, such information is essential for coordination at regional level. Moreover, several elements are subject to numerous monitoring frequencies, indicating that Member States have reported monitoring programmes already required under other legal obligations, such as the Water Framework Directive or the Regional Sea Conventions. The assessment also shows that frequency was not properly coordinated within Member States or across regions. The Commission therefore urges Member States to harmonise and clarify their reporting, for example by giving monitoring frequency ranges, and including details such as links to a particular descriptor criterion, spatial scope, etc.

Moreover, the **spatial delineation of the monitoring programmes** is not clear and details on the sampling stations are missing. The spatial coverage should indicate the extent of the area covered by the monitoring programme (as a percentage or layer), either within the area of jurisdiction or within the area of species spatial distribution. For instance, for highly mobile species, this field should either correspond to the monitored area against the spatial distribution of the species or it should be omitted to avoid unnecessary burden.

Finally, it is important to highlight that **temporal and spatial inconsistencies** are among the most common gaps; the data reported does not provide enough details to understand where and at what frequency monitoring takes place.

2.4 Regional coordination

Although several regionally agreed monitoring methods exist²⁴ and are used by some Member States, in many cases Member States indicated that they use national or 'other'

²² [Find your EU funding programme for the environment - Publications Office of the EU \(europa.eu\)](https://ec.europa.eu/eip/eip-environment/)

²³ See p.179 of the JRC analysis.

²⁴ Mostly from two regional sea conventions, in the Northeast Atlantic (OSPAR) and the Baltic Sea (HELCOM).

monitoring methods²⁵. This means that substantial differences persist in the number of elements considered and in the parameters monitored by Member States within the same region. In particular, regional cooperation on monitoring still requires a great deal of regional harmonisation, for example for descriptors such as food webs (descriptor 4) and hydrographical changes (descriptor 7).

The Commission participates actively in the work of the Regional Seas Conventions; it represents the EU as a contracting party (Barcelona Convention, OSPAR and HELCOM) or as an observer (Bucharest Convention). It also supports projects and activities via dedicated EU-funds to increase regional coordination of Member States' monitoring programmes. This was the case for the EMFF and will continue to be the case for its successor, EMFAF²⁶.

2.5 Coherence with other policies

The monitoring programmes should have provided information on which other EU policies and international agreements (including Regional Sea Conventions) they contribute to and vice versa. Member States have indicated several policies and frameworks relevant for the monitoring of the different MSFD descriptors, although not in a consistent way²⁷.

For instance, if we consider references to EU legislation in Decision 2017/848/EU, for the descriptor on non-indigenous species (descriptor 2), the Invasive Alien Species Regulation²⁸ is reported by only five Member States in the Baltic²⁹, four in the Atlantic³⁰ and only two Member States in the Mediterranean³¹. This is surprising given the links between the two pieces of legislation. The Data Collection Framework Multi-Annual Plan of the Common Fisheries Policy³², which is the main monitoring programme for commercial fisheries species, is reported by all Member States under the commercial fisheries and shellfish descriptor (descriptor 3), either on its own or in combination with other programmes. For eutrophication (descriptor 5) and contaminants (descriptor 8), reporting is mostly linked to the Water Framework Directive³³ and to the Foodstuffs Regulation³⁴ for contaminants in seafood (descriptor 9). For the biodiversity descriptor (descriptor 1), the majority of the Member States referred to the established monitoring programmes from the Habitats and Birds Directives and the Common Fisheries Policy. While this is encouraging, efforts are still needed to align monitoring between the above-mentioned directives and the MSFD. Furthermore, while many Member States refer to the underwater noise monitoring established

²⁵ See p.119-149 and 181 of the JRC analysis.

²⁶ [EMFAF Call for Proposals - Regional flagships projects supporting sustainable blue economy in EU sea basins \(europa.eu\)](#).

²⁷ See p.150-157 and 181 of the JRC analysis.

²⁸ Regulation (EU) No 1143/2014 of the European Parliament and of the Council of 22 October 2014 on the prevention and management of the introduction and spread of invasive alien species

²⁹ Denmark, Estonia, Latvia, Finland, and Sweden.

³⁰ Belgium, Denmark, Spain and Sweden.

³¹ Spain and Italy.

³² Regulation (EU) No 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy.

³³ Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for community action in the field of water policy.

³⁴ Regulation (EC) No 852/2004 of the European Parliament and of the Council of 29 April 2004 on the hygiene of foodstuffs.

under Regional Sea Conventions (namely OSPAR and HELCOM) as relevant for descriptor 11 on energy and underwater noise of the Directive, few Member States have indicated the links with those programmes with any level of detail.

2.6 Progress compared to the 2014 monitoring reports

The 2020 reporting followed a simpler approach compared to the previous exercise. Member States were asked to link their 2014 monitoring programmes to the new reporting format to take into account Decision 2017/848/EU. However, not all complied with this request³⁵. Many entries from the 2014 reporting were missing or reported differently in 2020. This is expected to be resolved in the coming reporting cycles, thanks to the simpler approach (reducing from three to two the levels of reporting) introduced as from the 2020 reporting exercise.

3. CONCLUDING REMARKS

When developed properly, monitoring programmes can not only inform public authorities on the state of the marine environment, but can also help Member States and economic operators to better understand the link between their activities and the impacts they have. For example, monitoring programmes should be able to provide information on the positive impact of fisheries management measures on those species and habitats that benefit from the measures. Similarly, information on land-based activities, such as agriculture, can lead to remedial measures that eventually reduce eutrophication caused by these activities. Furthermore, solid monitoring mechanisms improve the understanding of the impacts of projects with high economic or social relevance, such as the decommissioning of offshore oil and gas installations or the massive deployment of offshore renewable energies. Monitoring therefore contributes to a better mitigation of environmental risks and reassures the public, facilitating the acceptance of public investment decisions.

The latest compilation of elements, features and parameters monitored across the EU for all MSFD descriptors has identified monitoring gaps. From the information reported, it is difficult to assess the links with other MSFD reporting obligations (namely Articles 8, 9, 10 and 13), particularly because good environmental status, targets and measures have not been reported in a sufficiently concrete and measurable way in previous MSFD reports, as highlighted in the Commission's 2022 assessment. Moreover, common monitoring programmes across sectors and regions are inconsistently reported. This indicates that Member States are not yet making the most of the links with other sectors either at national or regional level, leading to inefficiencies.

Work to address those gaps should be given priority by Member States at all implementation levels of the Directive. These recommendations should help Member States to fill the gaps and develop efficient monitoring programmes that will ultimately contribute to achieving their environmental objectives. A clean and healthy marine and coastal environment is not only a legal requirement or a moral obligation to future generations. It is also the necessary basis of all maritime activities and an essential condition for the sustainability of key economic sectors, such as fisheries and tourism. This makes protection and systematic monitoring of the marine and coastal environment a truly meaningful investment, including from an economic point of view.

³⁵ See p.164-166 and 183 of the JRC analysis.

The Commission is aware that monitoring environmental parameters to assess the marine environment is an enormous task. It covers numerous aspects, ranging across many marine species, habitats and multiple anthropogenic pressures and impacts. The efforts made by Member States are remarkable and despite the shortcomings identified, it should be recognised that coordinated environmental marine monitoring in the EU under the MSFD and with four Regional Sea Conventions is a globally unique achievement.

As underlined in its report to the European Parliament and the Council on the MSFD implementation in 2020³⁶, the Commission considers the Directive a harmonised legal framework that enables constant improvements in data gathering and fosters the design of comprehensive marine monitoring programmes. In this same report, the Commission also points out that the data collected by Member States – through MSFD monitoring programmes – are often not comparable. It also points to the fact that those monitoring programmes are not always linked to the targets, and because they are set up before the measures, the connection between the two is often suboptimal.

The Commission maintains that monitoring programmes should measure in a harmonised way the state of the marine environment, the achievement of environmental targets and the effectiveness of measures. The Commission will integrate these considerations into the ongoing review of the MSFD, while aiming to simplify reporting requirements at the same time. Ultimately, the data derived from these monitoring programmes are essential to implement the European Green Deal, feeding, as they become available, into the Zero Pollution and the Biodiversity Monitoring Frameworks under the overarching eighth Environment Action Programme (EAP) Monitoring Framework. Finally, they will also contribute to implementing the Kunming-Montreal Global Biodiversity Framework, by populating the marine-related headline and other indicators and by facilitating the adaptation of the national biodiversity strategies and action plans.

³⁶ [Report on the implementation of the Marine Strategy Framework Directive \(europa.eu\)](#).