



Marine Strategy Framework Directive (MSFD)

Common Implementation Strategy

MSFD guidance: reporting on the 2021 update of Articles 13 and 14, and the 2024 update of Article 18

MSFD GUIDANCE DOCUMENT 18

12 NOVEMBER 2021

Further guidance for reporting, including use of the MSFD web reporting tool and schemas, is available from <http://cdr.eionet.europa.eu/help/msfd>.

Disclaimer:

This document has been developed through a collaborative programme involving the European Commission, all EU Member States, the Accession Countries, and Norway, international organisations, including the Regional Sea Conventions and other stakeholders and Non-Governmental Organisations. The document should be regarded as presenting an informal consensus position on best practice agreed by all partners. However, the document does not necessarily represent the official, formal position of any of the partners. Hence, the views expressed in the document do not necessarily represent the views of the European Commission.

Recommended citation:

European Commission. 2021. MSFD guidance: reporting on the 2021 update of Articles 13 and 14, and the 2024 update of Article 18. (MSFD Guidance Document 18). Brussels. Pp 49.

Contents

1	INTRODUCTION	4
2	DEFINITIONS	5
2.1	“PROGRAMME OF MEASURES” (POM)	5
2.2	“MEASURES”	5
2.3	CATEGORY 1 MEASURES (CALLED “EXISTING MEASURES” IN GD10).....	6
2.4	CATEGORY 2 MEASURES (CALLED “NEW MEASURES” IN GD10)	6
2.5	“MEASURES OF THE FIRST CYCLE”	7
2.6	“KEY TYPE OF MEASURES” (KTM).....	7
2.7	“DETAILS OF THE UPDATE”	7
3	REQUIREMENTS OF ARTICLES 13, 14, 17 AND 18	7
3.1	ARTICLE 13 PROGRAMME OF MEASURES	7
3.2	ARTICLE 14 EXCEPTIONS	8
3.3	ARTICLE 17 UPDATING.....	8
3.4	ARTICLE 18 INTERIM REPORT	8
4	UPDATING THE REPORTS FOR ARTICLES 13, 14 AND 18	9
4.1	GENERAL APPROACH TO REPORTING ON THE UPDATES.....	9
4.1.1	<i>Developments since the first cycle reporting</i>	9
4.1.2	<i>Information to be reported for Articles 13, 14 and 18</i>	9
4.2	SUMMARY REPORT OF THE UPDATED POM	10
4.2.1	<i>General overview</i>	10
4.2.2	<i>Detailed information on measures and exceptions</i>	11
4.3	REPORTING ON MEASURES	12
4.3.1	<i>Treatment of different categories of measures</i>	12
4.3.2	<i>Information on measures to be reported</i>	12
4.3.3	<i>Preliminary steps: updating MRUs, targets and indicators</i>	14
4.3.4	<i>Interim progress report on implementation (Article 18)</i>	14
4.4	REPORTING ON EXCEPTIONS.....	17
4.5	EXTENDED WFD REPORTING	18
5	PROCEDURES AND FORMAT FOR REPORTING	19
5.1	REPORTING TOOLS	19
5.2	TECHNICAL SUPPORT FOR REPORTING	20
5.3	REPORTING LANGUAGE	20
5.4	REPORTING FORMAT	21
5.5	FORMAL NOTIFICATION.....	21
	ANNEX I: E-REPORTING SCHEMAS AND GUIDANCE	23
A)	MEASURES	23
B)	EXCEPTIONS	37
	ANNEX II: QUALITY CONTROL PROCEDURES	44

LIST OF ACRONYMS

BSC	Black Sea Commission, implementing the Convention on the protection of the Black Sea against pollution (Bucharest Convention)
BWD	Bathing Water Directive
CFP	Common Fisheries Policy
EEA	European Environment Agency
EU	European Union
GES	Good Environmental Status (MSFD Articles 3(5) and 9)
GIS	Geographic Information System (file types)
HELCOM	Helsinki Commission, implementing the Helsinki Convention on the Protection of the Marine Environment of the Baltic Sea Area
MS	Member States
MSFD	Marine Strategy Framework Directive
OSPAR	Oslo-Paris Commission, implementing the Oslo-Paris Convention for the Protection of the Marine Environment of the North-East Atlantic
PoM(s)	Programme(s) of Measures
QC	Quality control
UNEP-MAP	United Nations Environment Programme – Mediterranean Action Plan, implementing the Barcelona Convention for the protection of the marine environment and coastal region of the Mediterranean
ReportNet	Eionet’s infrastructure for supporting data flows (e.g. by Member States for reporting obligations under an EU Directive)
UWWTD	Urban Waste Water Treatment Directive
WFD	Water Framework Directive
WISE	Water Information System for Europe
XML	Extensible Mark-up Language (file types)

Marine Strategy Framework Directive (MSFD)

Common Implementation Strategy

Reporting on the 2021 update of Articles 13 and 14 and the 2024 update of Article 18, for the Marine Strategy Framework Directive

1 INTRODUCTION

In accordance with Article 17(2) of the Marine Strategy Framework Directive (MSFD, Directive 2008/56/EC), Member States are to review and update their marine strategies every six years. This includes the reports on programmes of measures under Article 13 and exceptions under Article 14 which were prepared in 2015, and which are to be updated by 31 December 2021 and notified to the European Commission by 31 March 2022 at the latest. An interim report, in accordance with MSFD Article 18, on progress in implementation of the programme of measures was prepared three years later, by 31 December 2018. The next interim report on the implementation of the updated programme of measures is due by 31 December 2024.

This reporting guidance aims to support Member States with marine waters in fulfilling their 2022 and 2024¹ reporting obligations on updated programmes of measures, exceptions and the further interim progress report.

The obligation to report under Article 17(3) and (2)(d) on the review of programme of measures and Article 18 on progress in the implementation of that programme applies to Member States with marine waters, as defined in MSFD Article 3(1). Land-locked countries are not required to report under these two articles.

MSFD Guidance Document 10 (hereafter [GD10](#)²) was updated in June 2020 to help Member States by providing basic principles for updating the programme of measures in the second MSFD cycle, taking into account the lessons learnt from the first cycle. As explained in section 6.1.2 of GD10, the guidance and *“in particular the list of detailed information provided in section 6.1.1, should be translated into technical reporting requirements and the reporting sheets for the update of the PoM, to be defined by WG DIKE in the light of the modernisation of EEA e-reporting process in the context of European*

1 The Programmes of Measures and Exceptions (Articles 13, 14) and interim reports under Article 18, and subsequent 6-year updates under Articles 17 and 18, were/are due to be completed by 31 December of the relevant year. They are referred to throughout this guidance as the 2015 Programme of Measures (Articles 13 and 14) and 2018 (Article 18) reports (first cycle) and the 2021 Programme of Measures and 2024 reports (second cycle) respectively. Member States' notifications to the Commission for Articles 13 and 14 occur 3 months later and fall into the subsequent year (i.e. 31 March 2016 and 2022). Notifications for Article 18 coincide with 31 December in 2018 and 2024.

2 Programmes of measures (Articles 13 & 18) and Exceptions (Article 14) under the Marine Strategy Framework Directive – Recommendations for implementation and reporting for the Article 17 updates in the second cycle ([MSFD Guidance Document 10 \(update\) - June 2020](#)).

Commission Actions to Streamline Environmental Reporting and transcribed into an update of Guidance Document 12”.

The information reported by Member States under Articles 13 and 14 will be used by the Commission services for assessing under MSFD Article 16 whether the elements notified are consistent with the requirements of the MSFD in each Member State as well as the coherence of frameworks within the different marine regions or subregions and across the Union, as was done for the 2015 programmes of measures and exceptions³.

The reported information will also serve the preparation of reports, for example to the European Parliament, Council and the general public, on implementation of the MSFD. It can also help determining topics where, at the EU level, exchange of experiences and/or additional knowledge and information could help Member States. All the information reported will be made publicly available through WISE-Marine⁴, a web-based content management system that shows the efforts made across Europe on implementation of the MSFD.

2 DEFINITIONS⁵

In addition to the definitions set in MSFD Article 3, for the purpose of implementing and reporting under Article 13 and the Article 17 and 18 updates, the following terms should be understood as follows:

2.1 “Programme of Measures” (PoM)

A "Programme of Measures" (PoM) is a set of measures that the Member State is responsible for implementing, put into context with each other and in relation to their contribution to achieving or maintaining GES⁶, and referring also to the environmental targets they address. The PoM integrates measures devised pursuant to Article 13(1) MSFD (so-called “new measures” or Category 2 measures, see section 2.4) and relevant measures required under Union legislation, international agreements or national policies (so-called “existing measures” or Category 1 measures; see section 2.3).

Member States were due to establish their Programmes of Measures by the end of 2015 and to notify them to the Commission by 31 March 2016. These PoMs are referred to in this Guidance Document as the “Programmes of Measures of the first cycle” or the “Programmes of Measures 2016-2021”. The 2021 update of the PoM is referred to in this Guidance Document as the “updated PoM”.

2.2 “Measures”

A “measure” in the MSFD is any action on a national, regional, European or international level which is intended to help achieve or maintain GES and to achieve the environmental targets.

While MSFD measures will primarily focus on changing the intensity, frequency or distribution of pressures affecting the marine environment and which are preventing the achievement or

³ [COM\(2018\) 562](#); [SWD\(2018\) 393 final](#); [SWD\(2019\) 510 final](#)

⁴ <https://water.europa.eu/marine>

⁵ Same definitions as in updated GD10, to ensure full consistency.

⁶ Good environmental status.

maintenance of GES, actions to improve environmental status directly, such as active restoration of habitats and reintroductions of species, can also be defined as measures under the MSFD.

MSFD Annex VI lists the types of measures that Member States should take into consideration. Research actions, and other actions undertaken by Member States to fill gaps for other parts of the Directive (e.g. assessment, GES determination, target setting or monitoring programmes under Articles 8, 9, 10 and 11) are by definition not measures. These actions can be submitted as a supplementary list to the PoM but do not need to be aligned to specific environmental targets, and they are not subject to cost-benefit and/or cost-effectiveness assessments.

2.3 Category 1 measures (called “existing measures” in GD10⁷)

“Existing measures” are measures adopted under EU legislation, by Regional Sea Conventions or other international agreements or by national legislation. They are designed for the implementation of those policies but are relevant for and contribute to achieving the objectives of the MSFD.

For the purpose of reporting, “existing measures” are categorised as:

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

2.4 Category 2 measures (called “new measures” in GD10)

“New measures” are measures specifically devised pursuant to Article 13(1) in order to achieve or maintain GES. “New measures” can be adopted in the first and any subsequent reporting cycle.

For the purpose of reporting, “new measures” are categorised as:

- a. Category 2.a: Additional measures to achieve and maintain GES which build upon existing implementation processes regarding other EU legislation and international agreements but go beyond what is already required under these;
- b. Category 2.b: Additional measures to achieve and maintain GES which do not build on existing EU legislation or international agreements.

⁷ The definitions reproduced here are those agreed in the updated Guidance Document 10. It is important to ensure a consistent application of categories 1 and 2, making clear that they relate to the framework under which they are adopted, and not to the cycle. These explanations may be useful: a) a category 2 measure cannot become a category 1 measure due to completion of a reporting cycle / passage of time; b) a measure adopted under other policies, after the PoM of the first cycle was adopted, should be categorised as an additional “existing measure” (category 1).

2.5 “Measures of the first cycle”

“Measures of the first cycle” are the existing (categories 1.a and 1.b) and new (categories 2.a and 2.b) measures that were reported by Member States as part of their PoM in the first cycle.

2.6 “Key type of measures” (KTM)

“Key type of measures” are a defined set of measure categories which are directly relevant to the main pressures or to generic types of measures. KTMs have been defined to organise the measures for the purpose of reporting. For a coordinated reporting between the Water Framework Directive (WFD) and the MSFD, a joint set of KTMs is used.

2.7 “Details of the update”

The “details of the update” refer to changes introduced since the PoM of the first cycle. Member States need to present this information to public consultation, in accordance with MSFD Article 19(2), and report it to the Commission under Article 17.

3 REQUIREMENTS OF ARTICLES 13, 14, 17 AND 18

3.1 Article 13 programme of measures

According to Article 13, Member States are to identify the measures which need to be taken in order to achieve or maintain good environmental status (GES):

- a. On the basis of the assessment made under Article 8(1) and updated under Article 17(2)(a);
- b. By reference to the environmental targets established under Article 10(1) and updated under Article 17(2)(b);
- c. Taking into consideration the types of measures listed in MSFD Annex VI.

These measures are to be integrated into a programme of measures (PoM), taking into account relevant measures under Union legislation, in particular the Water Framework Directive (WFD, Directive 2000/60/EC), the Urban Waste-Water Treatment Directive (UWWTD, Directive 91/271/EEC) and the Bathing Water Directive (BWD, Directive 2006/7/EC), as well as forthcoming legislation on environmental quality standards in the field of water policy, and international agreements.

When drawing up their PoMs, Member States need to (Article 13(3, 4, 7 & 8)):

- a. give due consideration to sustainable development, including the social and economic impacts of the measures;
- b. ensure the measures are cost-effective and technically feasible, and carry out impact assessments, including cost-benefit analyses, prior to the introduction of any new measure;

- c. include spatial protection measures;
- d. indicate how the measures are to be implemented and how they will contribute to the achievement of the environmental targets;
- e. consider the implications of the PoM on waters beyond their marine waters.

3.2 Article 14 exceptions

Article 14 allows a Member State to identify instances within its marine waters where the environmental targets or GES cannot be achieved in every respect through measures taken by that Member State or, due to natural conditions, cannot be achieved on time.

These instances are to be clearly identified in the PoM and reasons substantiated to the Commission. In addition, the Member State needs to take appropriate ad-hoc measures aiming to continue pursuing the environmental targets, to prevent further deterioration in environmental status, and to mitigate the adverse impact in the marine region or subregion and in other Member States' marine waters.

Member States shall not be required, except in respect of the initial assessment described in Article 8, to take specific steps where there is no significant risk to the marine environment, or where the costs would be disproportionate taking account of the risks to the marine environment, and provided that there is no further deterioration (Article 14(4)). Justification to substantiate the decision to not take these steps shall be provided to the Commission.

3.3 Article 17 updating

Member States are to ensure their marine strategies for each relevant marine region or subregion are kept up to date. This includes reviewing their PoMs every six years, in a coordinated manner as referred to in MSFD Article 5, and providing updates to the Commission, the Regional Sea Conventions and to any other Member State(s) concerned.

3.4 Article 18 interim report

Article 18 requires Member States to submit to the Commission a brief interim report describing progress in the implementation of that programme.

4 UPDATING THE REPORTS FOR ARTICLES 13, 14 AND 18

4.1 General approach to reporting on the updates

4.1.1 *Developments since the first cycle reporting*

The reporting requirements for updating the 2015 reports for Articles 13 and 14 and the 2018 reports for Article 18⁸ were revised in 2020 (GD10 - 2020 update), with an outline of the reporting requirements provided in section 6 of GD10.

This revised reporting guidance takes account of the Commission's Article 16 assessment of the 2015 PoMs and exceptions, in particular the need to specify more clearly the expected contributions of measures to achieving GES and the environmental targets.

The reporting also takes account of the Action Plan to Streamline Environmental Reporting (COM(2017) 312), where reporting obligations should:

- a. include the key indicators needed to assess compliance and understand performance in delivering objectives;
- b. reduce textual reporting requirements and promote good IT practices such as common open source standards;
- c. harmonise and centralise (some) aspects of processes to make them more effective and efficient; and make better use of data from EU sources.

In line with the recent approaches to reporting for Articles 17 and 18, all structured e-reporting should maximise the use of categorical information and keeping text reporting to a minimum. Compared with the 2015 reporting of Articles 13 and 14, there is an increased use of code (enumeration) lists in order to improve the consistency of reporting between Member States and its usefulness for analysis and dissemination. The relevant code lists from the 2018 reporting of Article 17(2)(a) and (b) updates for Articles 8, 9 and 10⁹ and 2020 reporting of Article 17(2)(c) updates for Article 11¹⁰ have been included to allow linkages between the information reported under the different articles. Wherever possible, the information reported previously will be used to prefill the e-reports, thus providing the basis for the updated reports and minimising the efforts needed by Member States.

The e-reporting will be implemented through the EEA's new ReportNet 3.0 infrastructure, which provides a range of tools to enter, import, export and display the reported data.

4.1.2 *Information to be reported for Articles 13, 14 and 18*

The content of the 2021 updated PoM reports, updating Articles 13 and 14 for each marine or subregion relevant for the Member State, is outlined in GD10 section 6.1, and consists of:

⁸ Reporting on programmes of measures (Art. 13), on exceptions (Art. 14), and on interim reports (Art. 18) for the Marine Strategy Framework Directive, July 2018 ([MSFD Guidance Document 12](#)).

⁹ [GD14 MSFD reporting guidance on 2018 updates of Art.8-9-10_rev20191015](#); [GD14 MSFD reporting guidance on 2018 updates of Art.8-9-10 AnnexII WorkedExamples_rev20190913](#).

¹⁰ [GD17 MSFD reporting guidance on 2020 updates of Art.11](#).

- a. Summary report;
- b. Reporting sheets for measures and exceptions
- c. Extended WFD reporting.

As mentioned in GD10, the detailed information on measures and exceptions is converted into an electronic reporting structure, as outlined in sections 4.3 and 4.4, and detailed in Annex 1.

Detailed information on the state of implementation (Article 18 update) will be reported in 2024, exclusively in electronic format, through an update of the “measures” schema. The schema will be prefilled with information from the first cycle and from 2021 updates of Article 13 reporting (see section 4.3.4).

4.2 Summary report of the updated PoM

The summary report of the updated PoM provides an overview of the details of the update of the PoM(s) for each marine (sub)region relevant for the Member State and, as set out in GD10 section 6.1.1, consists of:

- a. General overview
- b. Detailed information on measures
- c. Detailed information on exceptions

The summary report is a text-based report.

4.2.1 General overview

The general overview should contain:

- a. A concise summary of changes to first cycle PoM;
- b. The environmental targets corresponding to the updated PoM;
- c. An updated overview of relevant changes in the existing measures with reference to their original publication¹¹;
- d. A short summary of the analysis of the contribution of the measures of the PoM (updated list of existing measures and new measures of the first cycle) to achieving the environmental targets and GES and the gap that needs to be addressed (gap analysis);
- e. An overview of additional new measures adopted in the second cycle under MSFD with a full description, if not described elsewhere (e.g. in a factsheet), or with reference to a document containing a full description;
- f. A summary of updated descriptions of any new measures adopted in the first cycle which have been updated/amended since with reference to the document containing the full updated description;

¹¹ Point c refers to an update of the list of existing measures.

- g. Summary of identified spatial protection measures and the purpose for which they are put in place;
- h. An overview of applied exceptions under Art. 14 with substantiated justifications and associated ad hoc measures where relevant to continue pursuing the environmental targets;
- i. A summary description of methods applied for 1) the gap analysis, 2) the selection of new measures in the second cycle, 3) the impact assessment of new measures (including cost-effectiveness analysis and cost-benefit-analysis if not described separately);
- j. A summary description of how future socio-economic developments and the interaction of the Programme of Measures with climate change (if relevant) have been taken into account in the update;
- k. Regional coordination and transboundary impacts;
- l. Public consultation information.

4.2.2 Detailed information on measures and exceptions

The contents of these two sections are given in GD10 sections 6.1.1.2 and 6.1.1.3.

More specific details on new measures are needed (presentable as a 'fact sheet' per measure). Member States' documentation can follow the national formats established for the first cycle. Reporting effort differs for:

- a. Updating of information on new measures reported in the first cycle, including
 - i. the state of implementation (initially reported under Article 18: not started, started);
 - ii. the withdrawal of a measure (initially reported under Article 18);
 - iii. the update of a measure (default: no; choice – reporting year: 2022).
- b. Compilation of information on new measures identified in the second cycle, as detailed in GD10 section 6.1.1.2 (see section 4.3).

The information to be reported per measure and exception is outlined in sections 4.3 and 4.4. The specific information to be reported electronically for the 2021 updated PoM, including a description of the fields that are part of the reporting schemas, is provided in [Annex I](#). Each schema also includes fields for the country, reporter and reporting date. The code lists (enumeration lists) to be used are directly available in ReportNet 3.0 (in the section for reporting on the updates of Articles 13 and 14) and in the MSFD resources page of the CDR: [Update of MSFD Articles 13 & 14 \(Programmes of measures and exceptions\)](#).

4.3 Reporting on measures

4.3.1 Treatment of different categories of measures

The measures included in the PoM fall into the following categories, each requiring a different level of information to be reported:

- a. For WFD measures (categories 1.a and 1.b) a coordinated approach between the MSFD and WFD reporting processes (both at EU level through Commission coordination and in each Member State) is necessary in order to make the relevant links between the two implementation processes. Links from WFD measures to MSFD were established in the 2016 WFD reporting. In the 2022 WFD reporting process¹², due in March 2022, full details of **WFD measures** that are intended to also contribute to the 2021 updated MSFD PoM are to be reported. Reporting of all relevant WFD measures (reported in both 2016 and 2022 WFD reporting processes) in the MSFD 2021 PoM update is therefore limited to providing a list of the WFD measure codes (expressed at the level of the relevant WFD KTMs or individually), a reference/URL to where the required details on the individual WFD measures can be found, and essential links to other aspects of the MSFD (e.g. descriptor, criteria, features, targets) as these would not be reported under WFD.
- b. Measures coming from other policies ('existing other measures', categories 1.a and 1.b) both from the first cycle and from the 2021 update; this information will be prefilled based on earlier reporting. If, since previous reporting, certain 1.b measures have been implemented (or additional 1.b measures are introduced), Member States are requested to update this information.
- c. Measures reported in the first cycle as 'new measures' (categories 2.a and 2.b); for these measures, documentation and data were reported in the first cycle and will be prefilled. If necessary, this documentation should be updated.
- d. Measures reported in the second cycle as additional 'new measures' (categories 2.a and 2.b); for these measures detailed information needs to be compiled for the first time.

4.3.2 Information on measures to be reported

Table 1 presents, for measures to be reported and as set out in GD10 (2020 update) section 6.1.1, the associated fields in the schema 'Measures' and the correspondence (or indicated as new fields) with the reporting under the first cycle, for both Articles 13 and 18. Information previously reported electronically under Articles 13 and 18 will be prefilled, so that only updating and gap-filling is necessary. This is further detailed in Annex Ia.

¹² See section 10.1 (Guidance on the contents of the RBMPs/background documents) of the 2022 WFD Reporting Guidance. It notably includes a required schema element "msfdRelevance" to report whether or not the national or RBD-specific measure is relevant for the purposes of the Marine Strategy Framework Directive. The RBMP or background document should also explain how the relevant measures being planned for compliance with the MSFD have been taken into account in the WFD PoM. [Water Framework Directive - River Basin Management Plans - 2022 Reporting \(europa.eu\)](https://european-council.europa.eu/media/en/press-communications/infographic/infographic_water-framework-directive-river-basin-management-plans-2022-reporting_europa.eu).

Table 1: Content of the reports on measures and associated schema fields. For existing fields (Articles 13 and 18), information reported electronically in the first cycle will be prefilled, as the basis for the 2021 reports.

Detailed information needed on measures (from GD10 section 6.1.1.2)	Field in the schema 'Measures'	Correspondence with first cycle reporting or new field ¹³	Only for Category 2 measures
a. Measure code	MeasureCode MeasureOldCode	Art13 #6, Art18 #1 New	
b. Measure name	MeasureName	Art13 #7, Art 18 #2	
c. Short description	MeasureDescription UpdateType MeasureCategory MeasurePurpose RegionSubregion SpatialScope MarineReportingUnit	New New Art18 #3 New Art13 #2 Art13 #13 Art13 #3	
d. For measure type 2.a, give policy(s) used (e.g. Habitats Directive, RSC measure)	PoliciesConventions PolicyNational	Art13 #8 New	
e. CEA undertaken (Not needed/Yes/No) + reference	CEA CEAreference	New New	Yes Yes
f. CBA undertaken (Not needed/Yes/No) + reference	CBA CBAreference	New New	Yes Yes
g. Responsible Competent Authority(s) (from MS Art. 7 report)	ResponsibleCompetentAuthority	New	Yes
h. Responsible delivery authorities/ organisations (if different to Competent Authority)	ResponsibleOrganisation	New	Yes
i. Temporal coverage (start date, end date if appropriate)	TemporalScope	Art18 #8	
j. Expected year of full implementation	TemporalScope	Art18 #8	
k. Financing (state of securing, source of funding)	Financing	New	Yes
l. Level of coordination in implementation	CoordinationLevel RegionalCooperation_countries	New New	Yes Yes
m. Obstacles to implementation, if any	ImplementationReason ReasonDescription	Art18 #12 Art18 #13	
n. How will the effectiveness of the measure, once implemented, be assessed?	RelatedIndicator	New	
o. Relevant KTM(s) (under WFD or MSFD)	RelevantKTM(s)	Art13 #9	
p. Relevant environmental targets (from MS Art. 10 report)	RelevantTargets	Art13 #10	
	GEScomponent	Art13 #11, Art18 #4	

¹³ Note that some 'new' fields were reported in the 2015 PoM as part of the text-based 'Measure fact-sheet' but not in the xml schema.

Detailed information needed on measures (from GD10 section 6.1.1.2)	Field in the schema 'Measures'	Correspondence with first cycle reporting or new field ¹³	Only for Category 2 measures
q. Relevant GES component, features/elements and pressures addressed	Feature Element Pressures	Art13 #12 New New	
r. Further information, if available (URL link)	References	Art13 #15	

The following field, used in 2015 e-reporting, is no longer needed: Art13 #14 WFD reporting areas (these can be accessed via WFD reporting).

4.3.3 Preliminary steps: updating MRUs, targets and indicators

The Measures and Exceptions schemas contain fields to report on relevant Competent Authorities (reported in MSFDCompAuth.xls), Marine Reporting Units (reported in 4.geo.xml), environmental targets (reported in Art10_Targets.xml) and indicators (reported in Indicators.xml). The Measures and Exceptions schemas need to have the identification codes for these three issues available at the start of the reporting on measures and exceptions so that the relevant ones can be selected. Member States should ensure these three xml files are up-to-date (i.e. include all MRUs, targets and indicators that need to be referenced) **prior** to starting the reporting on measures and exceptions.

4.3.4 Interim progress report on implementation (Article 18)

4.3.4.1 Measures to be reported

The Article 18 interim report covers categories of measures as follows:

- a. Measures of category 1.a are by definition "implemented" and therefore do not need to be reported under Article 18, beyond indicating they are implemented and an end date. This information will be prefilled, where available. Thus, any reporting on progress in their implementation towards some endpoint is excluded.
- b. Measures of category 1.b that are related to the Water Framework Directive are subject to reporting under WFD reporting, where relevance for MSFD is indicated. Therefore, these do not need to be reported under Article 18.
- c. Measures of category 1.b from other policies (i.e. not related to the Water Framework Directive) are not linked in their reporting to MSFD and therefore need to be reported under Article 18.
- d. Measures of category 2.a and 2.b are additional measures specifically introduced for MSFD purposes and need to be reported under Article 18.

The measure code, measure name, category and MSFD Descriptor of measures reported for the first time in the second cycle or for which changes were reported in the second cycle under Article 13 (2021 update) and the Article 18 data reported under first cycle (2018) will be prefilled before Member States are requested to provide the additional Article 18 information in 2024. As is standard practice, the e-report is linked to the relevant Marine Reporting Units. The relevant fields for updating the Article 18 reporting are in the Measures schema and indicated in Table 2.

Table 2: Content of the interim progress report on implementation and associated schema fields.

Field in the schema 'Measures'	Correspondence with first cycle reporting	Prefilled from Art. 13 reporting, updated in 2021
MeasureCode	Art18 #1	Yes
MeasureName	Art18 #2	Yes
MeasureCategory	Art18 #3	Yes
GEScomponent	Art18 #4	Yes
ImplementationStatus	Art18 #5, #6	
TemporalScope	Art18 #8	Yes
ImplementationReason	Art18 #7, #10, #12	Yes
ImplementationDelay	Art18 #9	
ReasonDescription	Art18 #13	Yes
ProgressDescription	Art18 #14	

4.3.4.2 Progress in implementation

In order to describe the progress in implementation, some aspects of the measures and their state of implementation, as specified by Member States in their programmes of measures, should be clarified as follows:

- a. **Time:** the measure may relate to a single action by a deadline, or it may be distributed over a period of time (limited series of actions), or it may be open-ended (unlimited series of actions).
- b. **Space:** the measure may either have no spatial dimension, it may relate to specified places or areas, or it may be applicable everywhere.
- c. **Measure components:** the measures reported according to Article 13 can in some cases be aggregates of components that could themselves be considered measures, relating to legal, economic, technical or policy modes of action (see below) and aiming to lead directly or indirectly to a change in pressures on the marine environment and/or its state. A measure may thus comprise a single component, several components, or a mixture of preparatory steps and components which are implemented in succession or in parallel (or a mixture thereof).
- d. **Preparatory steps:** these may refer to, for example, research projects, studies, monitoring campaigns and stakeholder forums, which do not qualify as a measure as defined by this Guidance Document, but are part of the planning process and relevant for designing and successfully implementing the measure or a component thereof.

For each measure, progress in implementation is reported by selecting one from the following options:

- a. Implementation not started: The measure is reported as part of the PoM. The measure may be in the planning process. Preparatory steps may have been taken. Further details may be supplied in text field 'MeasureDescription';
- b. Implementation started: One or more planned components of the measure have been started, as described in the above definitions;

- c. Measure implemented: All planned components (in time and space) of the measure are fully completed;
- d. Measure ongoing: The measure is fully implemented and continues into the future. In measures or components with unlimited series of actions, the measure or component is fully implemented when the first action in the series has been completed;
- e. Measure withdrawn: 2015 measure is no longer pursued in the 2021 PoM.

For the definition above of the three implementation stages, the terms “started” and “implemented” for the different modes of action, as defined in updated GD10 Annex A.3, should be understood as follows:

- a. a legal measure or measure component
 - i. is “implemented” when the legal instruments have entered into force and are applicable or enforceable;
 - ii. The implementation has “started” when a draft instrument is submitted to formal legislative procedures and, in cases where a budget is required, has been budgeted;
 - iii. The year of implementation refers to the date when the legal instruments have all entered into force and are applicable or enforceable. For example, if the date in question is 31 December 2015, the year is 2015. If the date is 1 January 2016, the year is 2016.
- b. an economic measure or measure component
 - i. is “implemented”, when the financial instruments or incentives are fully financed, in force or actionable;
 - ii. The implementation has “started”, when a draft instrument is submitted to formal decision making and, in cases where a budget is required, has been budgeted;
 - iii. The year of implementation refers to the date when the financial instruments or incentives are all fully financed, in force or actionable.
- c. a technical measure or measure component
 - i. is “implemented” when all actions are completed in accordance with the planned spatial and temporal coverage of the measure and are in full operation;
 - ii. The implementation has “started” when at least one project is fully financed and the formal administrative procedure, required for its implementation has started (e.g. permission of any kind), or if no such procedures are needed, the technical work has started to materialise (e.g. construction works);
 - iii. The year of implementation refers to the date when all actions are completed in accordance with the planned spatial and temporal coverage of the measure and are in full operation.
- d. a policy measure or measure component
 - i. is “implemented” when all planned actions are realised, in operation or in force;

- ii. The implementation has “started”, when a full draft has been submitted to formal decision making and, in cases where a budget is required, has been budgeted;
- iii. The year of implementation refers to the date when all planned actions are realised, in operation or in force.

4.3.4.3 Withdrawal of measure, delay or other obstacles in implementation

Implementation of some measures may not have gone as originally envisaged, or it may have encountered obstacles that a Member State wishes to report. The aim of such reporting is to compile an overview of the difficulties that Member States may be facing, to enable them to learn from each other’s experiences and to strengthen cooperation among them in the next cycle of implementing the MSFD. The reporting schema makes allowance for this.

- a. **Withdrawal:** A special case of Stage 1 (not started) is when a measure has been withdrawn, i.e. contrary to the Programme of Measures reported under Article 13, the measure is no longer intended to be put into practice. That means that the measure has been cancelled for objective, specific and transparent reasons.

If a measure has been withdrawn, this amounts to an update of the Programme of Measures. The updated Programme of Measures has to be reported only under Article 13. However, Article 18 refers to the implementation of the original Programme of Measures of which the measure in question was a part, and a withdrawal amounts to a special case of the first implementation stage “Implementation not started”. Therefore, the withdrawal needs to be reported under Article 18. If a Member State has instead introduced an alternative measure and wishes to identify it, this can be done by using the free text field ‘MeasureDescription’.

- b. **Delay:** The reporting schema includes the field ‘TemporalScope’ for the year when implementation is expected to be complete. This field needs to be filled in regardless of whether a delay has occurred or not.

If the implementation of a measure is delayed compared to its originally intended schedule because of some obstacle, this should be noted in a separate field in the reporting schema ‘ImplementationDelay’. In this case, the year of implementation should be the actual one, i.e. taking the delay into account. For example, if the year of implementation was originally planned to be 2016, but due to a delay it has been postponed to 2018, then the end year to be reported in ‘TemporalScope’ should be 2018 and the delay to be reported is 2 years.

- c. **Other obstacles:** The implementation of a measure may have encountered or may be expected to encounter obstacles, even if no withdrawal or delay has occurred so far. It is of general interest to learn about the obstacles encountered by Member States. These other obstacles should be described in the text field ‘ReasonDescription’.

4.4 Reporting on exceptions

Table 3 sets out the information to be reported on exceptions, as set out in GD10 (2020 update) section 6.1.1.3, and the associated fields in the schema ‘Exceptions’. Details on reporting for each field are given in Annex Ib.

Table 3: Content of the reports on exceptions and associated schema fields.

Detailed information needed on exceptions (as defined in updated GD10 section 6.1.1.3) Changes compared to contents of the first cycle are indicated with an asterix (*)	Field in the schema 'Exceptions'	Correspondence with first cycle reporting or new fields
a. Exception code	ExceptionCode ExceptionOldCode	Art14 #6 New
b. Exception name	ExceptionName	Art14 #7
c. Exception type (according to options under Art. 14: (1) (a)-(e), (4))	ExceptionType ExceptionReason	New New
d. (if applicable) Mitigation – consequences for other Member States, ad-hoc measures taken and mitigation	Mitigation MeasuresAdHoc ¹⁴	New New
e. Relevant targets	RelevantTargets	Art14 #9
f. Relevant GES component, features/elements and pressures addressed	GEScomponent RelevantFeatures RelevantPressures	Art14 #10 Art14 #11 New
g. Spatial coverage of the exception ((sub)regions/assessment areas and geographic zones ¹⁵)	RegionSubregion Spatial scope_geographic zones MarineReportingUnit	Art14 #2 Art14 #12 Art14 #3
h. Substantiated justification (see below template from Table 7 in updated Guidance Document 12 which is confirmed for use in the second cycle)	JustificationDescription	New
i. If Art. 14(1)(e) is used, an estimation of when GES is expected to be achieved*	GESachieved	New
j. Further information, if available (URL link)	FurtherInformation	Art14 #13

The following field, used in 2015 e-reporting, is no longer needed: Art14 #8 KTM's.

4.5 Extended WFD reporting

As for the first cycle, a coordinated approach between the MSFD and WFD implementation processes in each Member State is necessary to make the relevant links between the two reporting processes. This information is reported via the WFD reporting process due in March 2022.

¹⁴ Ad-hoc measures for mitigation actions, that Member States are required to take under Article 14(1), should be included as an integral part of the PoM and reported in the Measures schema; they should be clearly identified under point (d) in the Exceptions schema.

¹⁵ As used in Article 11 reporting (Coastal waters, territorial waters, EEZ, etc).

Since the WFD reporting exercise will capture full details on **new measures which will be reported in 2022 under WFD** and which contribute to the 2021 updated MSFD PoM the information in the Summary report can be limited to a list of the relevant WFD KTM's and a reference/URL to where the required details on the individual measures can be found.

5 PROCEDURES AND FORMAT FOR REPORTING

This section outlines the mechanisms for preparing the reporting information, its formats and the transmission procedure as part of the formal requirement to notify the Commission.

5.1 Reporting tools

For 2021 update reporting, the reporting tools, including all the above-mentioned resources, have been updated according to what is described in this guidance¹⁶. The revised schemas ('Measures' and 'Exceptions') reflect the new reporting structure and contents, and the reporting resources page can be found under the 'MSFD' section in CDR Help¹⁷.

Schema files prefilled with the information reported in the first cycle according to the revised schemas will be made available on the reporting resources page for each Member State.

The schemas require previously reported information to be entered on competent authorities, marine reporting units, indicators and environmental targets. ReportNet 3.0 provides a drop-down list for each of these fields to enable easy selection of the correct information. Member States should ensure that the relevant reports are up to date, so that the latest code lists are available in ReportNet **before** starting to report into the Measures and Exceptions schemas. The relevant reports and CDR folders¹⁸ are as follows:

- a. Competent Authorities (MSFDCompAuth.xml);
https://cdr.eionet.europa.eu/be/eu/msfd_ca/
- b. Marine Reporting Units (4geo.xml, together with associated GIS shapefiles);
https://cdr.eionet.europa.eu/be/eu/msfd_art17/2018reporting/spatialdata/
- c. Indicators (Indicator.xml);
https://cdr.eionet.europa.eu/be/eu/msfd_art17/2018reporting/xmldata/
- d. Environmental targets (ART10_Target.xml);
https://cdr.eionet.europa.eu/be/eu/msfd_art17/2018reporting/xmldata/.

Quality control (QC) specifications have been developed to ensure that the schema files submitted are as required in the schema specifications and this guidance. Among these, there are 'Element checks', 'Within-schema checks' and 'Cross-schema checks'.

¹⁶ <https://cdr.eionet.europa.eu/help/msfd/MSFD%20ART13-14%202022>

¹⁷ <https://cdr.eionet.europa.eu/help/msfd>

¹⁸ Links provided are to Belgium's folders – replace 'be' with relevant Member State code. Note that when updated xml files for Indicators or Targets are uploaded, the previously reported Art. 8 GES and ESA and Art. 9 files need also to be uploaded to avoid errors in the validation.

Feedback is provided to Member States through *errors*, *warnings* and *blockers*, so that they can be aware of any errors in the files and amend the files before resubmission.

The QC specifications are part of the reporting package and accessible through the ReportNet 3.0 dataflow. A description of the QC procedures is included in Annex II.

5.2 Technical support for reporting

For details on the technical preparation of the reports, including use of online tools for reporting and preparation of schemas, as well as the applicable quality control rules, please refer to the CDR Help MSFD reporting resources page:

<http://cdr.eionet.europa.eu/help/msfd>

During the reporting process, the **MSFD Helpdesk** (msfd.helpdesk@eionet.europa.eu) will be in operation to support both content and technical queries which may arise.

The submission of final reports can only be done by a nominated MSFD reporter. However, these nominated reporters may allow other persons to either a) prepare the reporting information (write access) or b) view the reported information (read access). These functions can be assigned within ReportNet 3.0 by the nominated reporter at any time.

The list of nominated reporters is available here: http://www.eionet.europa.eu/ldap-roles/?role_id=extranet-msfdreporter-data. A Member State (via their members of the Marine Strategy Coordination Group or Working Group on Data, Information and Knowledge Exchange) may request changes to one or more of its nominated reporters by contacting the MSFD Helpdesk.

5.3 Reporting language

Member States have the right to complete their reports in any official EU language.

However, reporting of the few text fields in English is strongly encouraged by the Commission services for the following reasons:

- a. The information reported is needed to support and enhance ongoing cooperation among Member States within a region or subregion; use of a common language will facilitate such cooperation;
- b. The translation of a Member State's information into a common language will support its further use in aggregation of the information to regional, European and global scales;
- c. The Commission has 6 months from receiving all Member State reports in which to undertake its Article 16 assessment. If the information is available in a common language, this assessment will be greatly assisted. This short time period means it is not feasible to have the information formally translated; consequently, translation by the Member State itself prior to submission will help avoid misinterpretation of the information reported.

5.4 Reporting format

The format for reporting¹⁹ has not been *formally* specified in the directive. However, GD10 indicates that the summary report is a text-based report (see section 4.2), and the detailed reports per measure and exception are to be provided as e-reports (see section 4.3 and 4.4). The updated Article 18 report is also to be provided as an e-report (see section 4.3.4).

E-reporting in schema format is strongly encouraged by the Commission services for the following reasons:

- a. The information reported is needed to support ongoing cooperation among Member States within a region or subregion so that the marine strategies are coherent and follow common approaches, as required under Article 5(2); use of an electronic format enables the information to be made available in WISE Marine and will facilitate such regional and subregional cooperation;
- b. Provision of the information in a common format, such as through use of standard code lists, will support its further use in aggregation of the information to regional, European and global scales;
- c. The Commission has 6 months from receiving all Member State reports in which to undertake its Article 16 assessment. If the information is available in a common electronic format, this assessment will be greatly assisted. This short time period means it is not feasible to adequately assess and compare across Member State information which is provided in free-text reports following different structures and styles.

5.5 Formal notification

Formal notification of the Member State's report(s) should follow the standard practice, as follows:

The Member State's Permanent Representation to the European Commission should send to the Commission a) a suitable cover letter indicating the relevant Directive and articles to which the notification refers and b) the receipt(s) obtained from ReportNet of all the reports (files) that have been deposited in relation to this notification.

The cover letter and ReportNet receipt(s) can be sent in hard copy to the Head of Unit responsible for MSFD implementation (i.e. DG Environment Unit C.2), or electronically (as pdf files) via email (ENV-MARINE-ENVIRONMENT@ec.europa.eu).

The reports deposited in ReportNet 3.0 as part of the notification should be:

- a. Validated data for the following schemas: 'Measures' and 'Exceptions';
- b. Text-based (pdf file) national Summary report(s), consisting of a general overview and detailed information on measures and exceptions.

¹⁹ MSFD Article 24 provides for technical formats to be adopted for the purposes of transmission and processing of data, including statistical and cartographic data. MSFD implementation to date has relied upon definition of such technical formats (i.e. schema reports and GIS shapefiles) through informal agreement via the MSFD Common Implementation Strategy, including this reporting guidance.

- c. Any further information the Member State considers appropriate as part of its formal notification. This could, for example, include joint documentation ('roof report') prepared via a Regional Sea Convention or summary documentation used for the Article 19(2) public consultation where this differs to the text-based report under point (c).

ANNEX I: E-REPORTING SCHEMAS AND GUIDANCE

a) Measures

The schema fields and guidance is provided in Table 4.

Table 4 ‘Measures’ schema fields and guidance. New fields are marked with an asterisk (*).

Schema class	Schema field	Description	Property	Guidance
About the reporter				
Reporter Info	CountryCode	Country reporting	Required	Enter corresponding two-letter ISO country code from ‘CountryCode_Enum’.
Reporter Info	ContactName	Name of the reporter	Optional	Free text (max. 100 characters).
Reporter Info	ContactMail *	Email of the reporter or functional email of the organisation	Required	Enter corresponding email (max. 100 characters).
Reporter Info	ContactOrganisation *	Name of the reporter’s organisation and address	Required	Free text (max. 500 characters).
Reporter Info	ReportingDate	Date when the reporting has been done	Required	YYYY-MM-DD

Schema class	Schema field	Description	Property	Guidance
About the measure				
Measure	MeasureCode	Unique identifier for the measure	Required Prefilled from first cycle	<p>For measures reported in the 2015 Programme of Measures, enter either:</p> <ol style="list-style-type: none"> measure code reported in 2015, or a modified measure code, using MS code plus MS-defined alpha-numeric code (e.g. IT-D08-M007). In cases where the code has been modified since 2015, enter the code(s) from the corresponding 2015 measure(s) in the field 'MeasureOldCode'. <p>All measures reported in 2015 must be reported in 2021. In cases where the measure is withdrawn or fully implemented, and therefore no longer needed in the second cycle PoM, indicate this in field 'ImplementationStatus'.</p> <p>For new measures in the 2021 PoM, including those from other non-WFD policies, use MS code plus MS-defined alpha-numeric code (e.g. IT-D08-M007).</p> <p>For new WFD measures in the 2021 PoM, reporting can be either:</p> <ol style="list-style-type: none"> at the KTM level (i.e. report all the WFD KTMs relevant to the MSFD reporting area), giving each WFD KTM a unique MS/Measure code as per the other individual measures, e.g. IT-WFD20, and also give the WFD KTM code in the 'MeasureName' field, or at the WFD measure level (i.e. report all the WFD measures relevant to the MSFD reporting area), giving each WFD measure its unique WFD reporting code, prefixed by the MS code (e.g. DE-'WFD measure code').
Measure	MeasureOldCode *	Old code(s) of the measure(s) reported in the 2015 PoM	Conditional (on 2021 code being different to 2015 code)	Enter the old (2015) measure code(s) corresponding to the single 2021 code given in field 'MeasureCode'.
Measure	MeasureName	Name of measure	Required Prefilled from first cycle	Free text (max. 300 characters).

Schema class	Schema field	Description	Property	Guidance
				<p>Enter a short name that reflects the main focus of the measure, such as the pressure and associated policy, e.g. OSPAR hazardous substances measures, Habitats Directive <i>Posidonia</i> restoration.</p> <p>For [prefilled] WFD measures, give only the relevant WFD KTM name (or the WFD measure name, if reporting at WFD measure level).</p>
Measure	MeasureDescription *	Short description of the measure	Optional	<p>Free text, preferably in English (max. 5000 characters).</p> <p>Short description of the measure.</p> <p>MS may include here additional information e.g., on purpose/aim of the measure, its method of implementation, and how its effectiveness will be assessed. MS can include here key changes, if the measure is modified since the first cycle. Add here specific points from other fields that may require an explanation.</p>
Measure	UpdateType *	Indicates whether the measure is unchanged, modified or new compared to that reported in the 2015 PoM.	Required	<p>Except for those measures reported as 'Withdrawn' or 'Measure implemented' in field 'ImplementationStatus', select one from the following:</p> <ul style="list-style-type: none"> • Measure same as in 2015 PoM; • Measure modified since 2015 PoM; • Measure new in 2021 PoM. • 2015 measure that was not reported electronically <p>Use 'Measure same as in 2015' when the measure remains essentially the same (i.e. it has the same purpose, spatial and temporal scope and implementation method, or has only minor changes, such as a change in the measure code or temporal scope). If these aspects are modified use 'Measure modified since 2015'; an explanation of the changes may be provided in 'MeasureDescription'.</p>
Measure	MeasureCategory	Indicates the measure category (1.a, 1.b, 2.a, 2.b)	Required Prefilled from first cycle	Select one from the following:

Schema class	Schema field	Description	Property	Guidance
				<ul style="list-style-type: none"> • Category 1.a: Measures relevant for the achievement and maintenance of GES under the MSFD that have been adopted under other policies and implemented; • Category 1.b (non-WFD): Measures relevant for the achievement and maintenance of GES under the MSFD that have been adopted under other policies but that have not yet been implemented or fully implemented; • Category 1.b (WFD): Measures relevant for the achievement and maintenance of GES under the MSFD that have been adopted under WFD but that have not yet been implemented or fully implemented; • Category 2.a: Additional measures to achieve and maintain GES which build upon existing implementation processes regarding other EU legislation and international agreements but go beyond what is already required under these; • Category 2.b: Additional measures to achieve and maintain GES which do not build on existing EU legislation or international agreements (i.e. a measure specifically to implement the MSFD).
Associated policy and implementation mechanism				
Measure	PoliciesConventions	Indicates the Union legislation/policy, international/regional agreement or national policy that is the originating source of the measure	Required Prefilled from first cycle	<p>Select one from the list: 'DirectivesConventions_Enum'.</p> <p>State the originating EU policy or international agreement (including Regional Sea Conventions) for the measure if it falls under category 1.a, 1.b or 2.a. For category 2.b, enter 'MSFD'.</p> <p>If it is a national policy that is implementing an EU policy or international agreement, enter the relevant originating EU policy or international agreement. The associated National policy can be given in 'PolicyNational'.</p> <p>If it is a national policy that is not implementing an EU policy or international agreement, enter 'National policy' and provide details in 'PolicyNational'.</p>

Schema class	Schema field	Description	Property	Guidance
Measure	PolicyNational	Indicates the name of the national policy (which may or may not be linked to an EU policy or international agreement)	Conditional (if field 'PoliciesConventions' = 'National policy')	Free text (max. 1000 characters). Provide the national policy when: <ul style="list-style-type: none"> a. 'National policy' is selected in 'PoliciesConventions', or b. An EU/international policy is selected in 'PoliciesConventions' and you wish to also indicate the associated national policy (in cases where the measure reported in 2015 was the national policy which implements an EU/international policy, enter that national policy here and report only the EU/international policy under 'PoliciesConvention'.
Measure	ResponsibleCompetentAuthority *	Indicates the responsible Competent Authority(s) (from Art. 7 reporting) for the measure	Required	For category 2.a and 2.b measures only: Select the relevant Competent Authority(s) from those reported under Article 7 who are formally responsible (within Government) for ensuring delivery of the measure. Enter several Competent Authorities in cases where the responsibility is shared (e.g. for different regions within a country). Note that if the Competent Authority devolves actual implementation of the measure to another organisation(s), such as a technical agency or subnational and local authorities, these can be indicated in field 'ResponsibleOrganisation'.
Measure	ResponsibleOrganisation *	Name of organisation(s) responsible for implementing the measure	Optional	For category 2.a and 2.b measures only: Free text (max. 1000 characters). If delivery of the measure is delegated by the Competent Authority(s) to other organisations, these can be listed here.
Measure	CoordinationLevel *	Level of coordination in implementation of the measure	Required	For category 2.a and 2.b measures only: Select one or several from List: 'Coordination level_Enum':

Schema class	Schema field	Description	Property	Guidance
				'local', 'sub-national', 'national', 'bilateral', 'subregional', 'regional – HELCOM', 'regional – OSPAR', 'regional – UNEP/MAP', 'regional – BSC', 'EU', 'international' (e.g. IMO).
Measure	RegionalCooperation_countries *	Other countries in the region involved in practical implementation of the measure	Conditional (if field 'CoordinationLevel' = 'regional – X')	<p>For category 2.a and 2.b measures only:</p> <p>Default: not relevant.</p> <p>If 'regional' is selected under 'CoordinationLevel' but there is only a subset of countries involved in implementing this particular measure, provide a list of these countries (from List 'CountryCode_Enum').</p> <p>Due to the large number of possible countries, this information is not required for EU or International policies.</p>
Setting up the measure				
Measure	CEA *	Indicates whether a cost-effectiveness assessment for the measure was undertaken	Required	<p>For category 2.a and 2.b measures only.</p> <p>Select one from the following: 'Not needed', 'Yes' or 'No'.</p> <p>If a CEA was undertaken (response = Yes), provide a reference in field 'CEAreference'.</p>
Measure	CEAreference *	Provides a reference for the CEA study	Conditional (if field 'CEA' = Yes)	<p>For category 2.a and 2.b measures only.</p> <p>Free text (max. 1000 characters).</p> <p>Provide the reference for the CEA study, including where possible a URL link to the report.</p>
Measure	CBA *	Indicates whether a cost-benefit analyses, prior to the introduction of a new measure, was undertaken	Required	<p>For category 2.a and 2.b measures only.</p> <p>Select one from the following: 'Not needed', 'Yes' or 'No'.</p> <p>If a CBA was undertaken (response = Yes), provide a reference in field 'CBAreference'.</p>

Schema class	Schema field	Description	Property	Guidance
Measure	CBAreference *	Provides a reference for the CBA study	Conditional (if field 'CBA' = Yes)	For category 2.a and 2.b measures only. Free text (max. 1000 characters). Provide the reference for the CBA study, including where possible a URL link to the report.
Measure	Financing *	Describes the source of funding and, if possible, the state of securing financing to implement the measure.	Required (if field 'UpdateType' = 'Measure new in 2021')	For category 2.a and 2.b measures only. Free text (max. 1000 characters). Provide a brief description of the source of funding, and if possible, the state of securing financing to implement the measure.
Where the measure is implemented				
Measure	RegionSubregion	MSFD region(s) and subregion(s) where the measure applies	Required Prefilled from first cycle	Select all relevant Regions and subregions, from the list 'RegionSubregion_Enum', where the measure applies in the Member State's marine waters. For North East Atlantic Ocean and Mediterranean Sea regions, enter the information at subregion level only.
Measure	SpatialScope	Spatial coverage of the measure, according to the jurisdictional zones of marine waters	Required Prefilled from first cycle	This field gives only a coarse categorization of the areas (zones) where the MS implements the measure. This refers to the zone where the action is taken, and not to the zones which may benefit from the action (e.g. a measure is implemented on land – 'Terrestrial part of MS' - to reduce consumption and waste of plastic bags, but the effects of the measure would be seen in several marine zones). If only a proportion of the selected category is covered by the measure, this can be described in 'MeasureDescription'. Select one (or more) from list: <ul style="list-style-type: none"> 'Terrestrial part of MS': refers to any implementation above the high water mark 'Transitional waters (WFD)'

Schema class	Schema field	Description	Property	Guidance
				<ul style="list-style-type: none"> • ‘Coastal waters (WFD)’ • ‘Territorial waters’ (0-12nm in most countries) • ‘EEZ (or similar)’ (e.g. Contiguous Zone, Fishing Zone, Ecological Protection Zone) – beyond territorial waters • ‘Continental shelf (beyond EEZ)’: refers to areas of MS seabed/subsoil beyond the zone where the Member State has jurisdiction over the water column (e.g. beyond 200nm of EEZs or the Territorial Waters/Contiguous Zone of some Mediterranean states). • ‘Beyond MS Marine Waters’: refers to Areas Beyond National Jurisdiction (ABNJ), including in the water column/air above MS Continental Shelf areas (i.e. high seas). It can also be used for implementation in waters of neighbouring countries.
Measure	MarineReportingUnit	Area(s) of MS marine waters where the measure is implemented or has effects	Required Prefilled from first cycle	Enter all relevant Marine Reporting Units for the MS marine waters where the measure is implemented or has effects (MarineUnitID, as reported by the Member State in 4geo.xml file). If measures are expected to have widespread effects (benefits) (e.g. measures related to pollution) then use an MRU for the entire marine waters (or for the marine waters in a particular region/subregion, if more appropriate). If measures are expected to benefit more specific areas (e.g. a protected area, or areas for particular activities) then use an MRU for a finer geographical area.
Scope and purpose of the measure – links to pressures, targets and indicators				
Measure	MeasurePurpose *	Indicates the main purpose(s) of the measure	Required	Select one or more from the list: <ul style="list-style-type: none"> • Directly prevent further inputs of a pressure (e.g. by managing the source activity)²⁰

²⁰ Equates to ‘input controls’ and ‘spatial and temporal distribution controls’ of MSFD Annex VI.

Schema class	Schema field	Description	Property	Guidance
				<ul style="list-style-type: none"> • Directly reduce existing levels of the pressure in the marine environment (e.g. removal of litter or oil spill clean-up)²¹ • Indirectly prevent further inputs of a pressure (e.g. by governance mechanisms, financial incentives, awareness campaigns)²² • Directly restores a species or habitat(s)²³ • Ad-hoc measure for an exception under Art. 14(1) (b), (c) or (d) • <i>Improve knowledge base (e.g. by research or one-off surveys)</i> • <i>Establish monitoring programmes (of relevant activities, pressures or impacts)</i>²⁴ • <i>Assess effectiveness of the measures (through assessing changes in state/impact/pressure in the marine environment)</i> • Not known <p>Note that, according to the definition in GD10, options f, g and h do not fall within the definition of measures, but if reported in the PoM update (e.g. because they were also reported in the first cycle), they should be classified here. These categories should only be used when they are the main focus of the reported 'measure' (i.e. not if they are a component of a measure focused on categories a-e).</p>
Measure	Pressures *	Pressure(s) addressed by the measure	Conditional (if field 'MeasurePurpose' = options a, b, c or e)	Select one or more from the list 'Feature_Enum': 'Pressure inputs to the marine environment' or from the 'Physical and hydrological' pressure options in 'Pressures and impacts in the marine environment'.
Measure	RelevantKTMs	Key Type of Measure(s) relevant to the measure	Required	Select one or more from the list: 'Key Types of Measures_enum'.

21 Equates to 'output controls' of MSFD Annex VI.

22 Equates to 'management coordination measures', 'economic incentives' and 'communication, stakeholder involvement and raising public awareness' of MSFD Annex VI.

23 Equates to 'mitigation and remediation tools' of MSFD Annex VI.

24 Includes 'measures to improve the traceability, where feasible, of marine pollution' of MSFD Annex VI.

Schema class	Schema field	Description	Property	Guidance
			Prefilled from first cycle	Select KTMs from the WFD or MSFD list as appropriate. It is preferable to associate each measure to only the most appropriate KTM; however, in some circumstances linkage to several KTMs may be necessary.
Measure	RelevantTargets	Indicates the environmental target(s) reported under Article 10 which the measure addresses	Required Prefilled from second cycle Article 10 update	List the relevant environmental targets (from Article 10 report in 2018). If the measure cannot be associated to any of the environmental targets currently reported under Article 10, then select 'No specific target addressed' from the list. If needed, this can be explained in the field 'MeasureDescription'.
Measure	RelatedIndicator *	Indicator(s) used to assess the effectiveness of the measure and progress towards its objective	Required	For category 1b (non-WFD), 2.a and 2.b measures only: Enter the indicator code(s) (as reported under the schema 'Indicators.xml' used in the 2018 update of Articles 8 and 10) for the indicator(s) which are directly relevant for assessing the effectiveness of the measure. Do not enter indicators which have only an indirect connection to the measure. For new indicators, firstly enter the indicator into the 'Indicator.xml' schema, using the following code structure: sub(region) code <u>plus</u> RSC/MS code <u>plus</u> defined alpha-numeric code (e.g. ABI-OSPAR-Nutrients2017). Once in the Indicator schema, the indicator will be available to select here. In cases where there is no indicator to assess the effectiveness of the measure, select 'No indicator'.
Links to GES criteria and ecosystem state				
Measure	GEScomponent	GES descriptor(s) and criteria addressed by the measure	Required Prefilled from first cycle (at descriptor level only)	Enter as many descriptor and criteria codes as relevant from list 'GEScomponent_Enum'. As long as the descriptor code is entered, it is only necessary to enter the criteria codes when considered relevant.

Schema class	Schema field	Description	Property	Guidance
Measure	Feature	Feature(s) addressed by the measure	Required Prefilled from first cycle (as broad categories)	<p>Enter the feature(s) from list 'Feature_Enum'. This list includes three sections, each intended for particular aspects of monitoring and assessment, but not confined to these:</p> <ul style="list-style-type: none"> • Ecosystem components • Pressures and impacts in the marine environment • Uses and human activities <p>For features related to 'Ecosystem components' or 'Pressure levels and impacts in the marine environment', specific elements may also be reported, in the field 'Elements'.</p>
Measure	Element *	Element(s) addressed by the measure (e.g. specific species, habitats, contaminants, litter categories)	Optional	<p>If the Features reported in field 'Features' do not provide sufficient detail, the specific elements may be entered here.</p> <p>The elements are to be selected from the MSFD Reporting Reference List (http://cdr.eionet.europa.eu/help/msfd). If the list does not contain the elements needed, contact msfd.helpdesk@eionet.europa.eu.</p> <p>For features in the list 'Uses and human activities' no elements are defined.</p>
<p>State of implementation for 2021 updates on first cycle Article 13 measures; for 2024 Article 18 reporting</p> <p>For measures from first cycle, prefilled from Article 18 reports of 2018. For second cycle, to be filled in 2024.</p>				
Measure	ImplementationStatus	Indicates the state of implementation of the measure	Required Prefilled from Art. 18	<p>Select one from the following:</p> <ul style="list-style-type: none"> • Implementation not started: The measure is a part of the Programme of Measures. The measure may be in the planning process. Preparatory steps may have been taken. Further detail may be supplied in text field 'MeasureDescription'; • Implementation started: One or more planned components of the measure have been started, as described in the definitions in section 4.3.4.2;

Schema class	Schema field	Description	Property	Guidance
				<ul style="list-style-type: none"> Measure implemented: All planned components (in time and space) of the measure are fully completed. Measure ongoing: measure is fully implemented and continues into the future. In measures or components with <u>unlimited</u> series of actions, the measure or component is fully implemented when the first action in the series has been completed; Measure withdrawn: 2015 measure is no longer pursued in the 2021 PoM. <p>When 'Measure implemented' is selected subsequent fields in this section on 'State of implementation', except 'TemporalScope', need not be completed.</p> <p>In cases where 'Measure withdrawn' is selected, provide a reason in 'ImplementationReason'.</p>
Measure	TemporalScope *	Start date (and end date, if appropriate) of the implementation period for the measure	Required Prefilled from Art. 18 for first cycle (end date)	<p>Enter the year the measure started and the year it is expected to be fully implemented (YYYY-YYYY). If the end date is unknown, or the measure has no end date (= ongoing), enter '9999' as end date.</p> <p>Only one start date and end date is permitted. The start date should be the earliest date that the measure started.</p>
Measure	ImplementationDelay	Indicates the delay (in years) in implementing the measure	Required (unless field 'ImplementationStatus' = 'Measure implemented' or 'Measure withdrawn') Prefilled from Art. 18	<p>In cases where the implementation start date of the measure is delayed from the previously reported start date, provide the period of delay, rounded to nearest full year; default =0.</p>

Schema class	Schema field	Description	Property	Guidance
Measure	ImplementationReason	Reason for withdrawal, delay or other obstacles when implementing the measure	Required (unless field 'ImplementationStatus' = 'Measure implemented' or 'Measure withdrawn') Prefilled from Art. 18.	<p>A predefined list of options for withdrawal, delay or other obstacles is provided, which are consistent with the reasons identified under WFD reporting²⁵, but with adaptations as needed in the context of the MSFD.</p> <p>Select one from the list:</p> <ul style="list-style-type: none"> • No obstacles to implementation; default response for when implementation has proceeded as expected; • Acceptance: There are difficulties in the acceptance of the measure, e.g. by certain stakeholders, government departments, Member States or in an EU or regional context. • Financing: Lack of financing: no or insufficient budget (including material and staff costs) yet approved. • Mechanism for implementation – national: There is a lack of mechanism for the implementation at the national level, e.g. the necessary regulation or other mechanism required for implementing the measure has not yet been adopted. • Mechanism for implementation – regional: There is a lack of mechanism for the implementation in a Regional Sea Convention, e.g. the necessary regulation or other mechanism required for implementing the measure has not yet been adopted. • Mechanism for implementation – EU: There is a lack of mechanism for the implementation at the EU level, e.g. the necessary regulation or other mechanism required for implementing the measure has not yet been adopted. • Mechanism for implementation – International: There is a lack of mechanism for the implementation at the international level, e.g. the necessary regulation or other mechanism required for implementing the measure has not yet been adopted.

Schema class	Schema field	Description	Property	Guidance
				<ul style="list-style-type: none"> • Technical implementation: New information on technical difficulties which prevent a measure from being implemented as planned. • Cost-effectiveness: New information on cost-effectiveness, i.e. either the measure is found not to be as effective as planned (at the cost originally envisaged) or the planned effect can only be achieved with higher costs. • Data or information: Data or information needs are greater than originally envisaged, to the extent that the measure cannot be implemented as planned • Other: For any other reasons, provide further detail in the field "ReasonDescription". <p>In case of more than one obstacle being encountered, report only the principal obstacle. An optional free text field 'ReasonDescription' is available to provide further information on the obstacle.</p>
Measure	ReasonDescription	Further information on withdrawal, delay or other obstacles when implementing the measure	Optional Prefilled from Art. 18	Free text (max. 2500 characters). Include a URL link with more information, if relevant.
Measure	ProgressDescription	Description of progress made in implementing the measure	Optional Prefilled from Art. 18	Free text (max. 2500 characters). Include a URL link with more information, if relevant.
Further information				
Measure	References	Reference(s) to further information about the measure	Optional Prefilled from first cycle	Free text (max. 2500 characters). Further information, if available (URL link or free text).

b) Exceptions

The schema fields and guidance is provided in Table 5.

Table 5 'Exceptions' schema fields and guidance

Schema class	Schema field	Description	Property	Guidance
ReporterInfo	CountryCode	Country reporting	Required	Enter corresponding two-letter ISO country code from 'CountryCode_Enum'.
ReporterInfo	ContactName	Name of the reporter	Optional	Free text (max. 100 characters).
ReporterInfo	ContactMail	Email of the reporter or functional email of the organisation	Required	Enter corresponding email (max. 100 characters).
ReporterInfo	ContactOrganisation	Name of the reporter's organisation and address	Required	Free text (max. 1000 characters).
ReporterInfo	ReportingDate	Date when the reporting has been done	Required	YYYY-MM-DD
Exception	ExceptionCode	Unique identifier code for the exception.	Required Prefilled from first cycle	<p>All exceptions reported in 2015 must be reported in 2021: For exception reported in 2015, enter either:</p> <ul style="list-style-type: none"> a. exception code reported in 2015, or b. a modified exception code. In cases where the code has been modified since 2015, enter the code(s) from the corresponding 2015 exception(s) in the field 'ExceptionOldCode'. <p>For new exceptions, reported in the 2021 for the first time, the unique identifier code should comprise:</p> <ul style="list-style-type: none"> a. MS code (e.g. DE, IT) (required)

Schema class	Schema field	Description	Property	Guidance
				<p>b. plus E (for exception) + 2 digit number (e.g. E01) (required)</p> <p>c. plus an MS-defined alpha-numeric code (optional, maximum 5 characters)</p> <p>d. The two (or three) parts are separated by dashes.</p> <p>Full code examples: BG-E01 or (with MS optional part): IT-E01-MED2b</p>
Exception	ExceptionOldCode	Exception code(s) used in 2015 Art. 14 report, if changed in 2021.	Required, where applicable	If exception reported for first cycle had a different code(s).
Exception	ExceptionName	Short name for the exception.	Required Prefilled from first cycle	Free text (max. 300 characters). Brief name for the exception.
Exception	ExceptionType	The most relevant MSFD Article 14 subparagraph which is applicable to the exception	Required	<p>Selection one exception type:</p> <ul style="list-style-type: none"> • Art. 14(1)(a) – Member State is not responsible • Art. 14(1)(b) – Natural causes • Art. 14(1)(c) – Force majeure • Art. 14(1)(d) – Overriding public interest • Art. 14(1)(e) – Natural conditions • Art. 14(4) – No significant risk or disproportionate costs.
Exception	ExceptionReason	Indicates the main reason(s) for needing an exception	Conditional: (in field 'ExceptionType', for all types except	<p>Select one (or more) of the following reasons (from Table 7 of GD12):</p> <p>Art. 14(1)(a):</p> <ul style="list-style-type: none"> • Action (e.g. environmental damage) caused by a third party for which the Member State is not responsible

Schema class	Schema field	Description	Property	Guidance
			Art.14(1)(e) – Natural conditions)	<ul style="list-style-type: none"> • Action needed by another Member State(s) • Action needed by another non-EU state(s) • Action needed by EU (e.g. CFP) • Action needed by another international Competent Authority (e.g. IMO) <p>Art. 14(1)(b):</p> <ul style="list-style-type: none"> • Floods • Hurricanes/typhoons/storms • Other <p>Art. 14(1)(c):</p> <ul style="list-style-type: none"> • Armed conflict • Terrorism • Major accident • Other <p>Art. 14(1)(d):</p> <ul style="list-style-type: none"> • Protecting fundamental values for citizens • Fundamental policies of State and Society • Economic or social activities fulfilling specific obligations of public services • Other <p>Art. 14(4):</p> <ul style="list-style-type: none"> • No significant risk

Schema class	Schema field	Description	Property	Guidance
				<ul style="list-style-type: none"> Disproportionate costs
Exception	GESachieved	Estimated date by when GES is expected to be achieved, for an Article 14(1)(e) exception.	Conditional (if field 'ExceptionType' = Art.14(1)(e) – Natural conditions)	In the case of Art 14(1)(e), provide an estimation of when GES is expected to be achieved (YYYY-YYYY). To allow for uncertainty in predicting a specific year, a date range can be entered. The range could be smaller when there is greater certainty and larger when there is less certainty (e.g. the timescale is far off).
Exception	RelevantPressures	Pressures that are the key reason for applying the exception and which are preventing the achievement of GES or associated targets	Conditional (in field 'ExceptionType', for all types except Art. 14(1)(e) and 14(4).	List the relevant pressure(s) that are preventing the achievement of GES and associated targets, from List: "Feature_Enum" 'Pressure inputs to the marine environment' plus physical and hydrological pressures from 'Pressures and impacts in the marine environment'.
Exception	RelevantTargets	Target(s), as reported under Art. 10, which are affected by the exception.	Conditional (in field 'ExceptionType', for all types except Art. 14(4) Prefilled from first cycle	Select all relevant targets, from those reported under Article 10 in 2018, that are affected by the exception (e.g. where the target is delayed or cannot be achieved). If the exception cannot be associated to any of the environmental targets currently reported under Article 10, then select 'No specific target addressed' from the list. If needed, this can be explained in the field 'JustificationDescription'.
Exception	GEScomponent	GES Descriptors and criteria affected by the exception	Required Prefilled from first cycle (at descriptor level only)	Select all relevant from List: GEScomponent_Enum. The relevant descriptor(s) must be reported; relevant criteria may also be reported.
Exception	RelevantFeatures	List of the features affected by the exception.	Required Prefilled from first cycle (at broad	Enter relevant feature(s) from the following two sections of the list 'Feature_Enum': <ul style="list-style-type: none"> Ecosystem components

Schema class	Schema field	Description	Property	Guidance
			ecosystem component level only)	<ul style="list-style-type: none"> Pressures and impacts in the marine environment
Exception	RegionSubregion	MSFD region(s) and subregion(s) where the measure applies	Required Prefilled from first cycle	<p>Select all relevant Regions and subregions, from the list 'RegionSubregion_Enum', where the exception applies in the Member State's marine waters.</p> <p>For North East Atlantic Ocean and Mediterranean Sea regions, enter the information at subregion level only.</p>
Exception	Spatial scope_geographic zones	Indicate the coverage of the exception according to the jurisdictional zones of MSFD marine waters.	Required Prefilled from first cycle	<p>Select one (or more) option(s) from List: Implementation zones:</p> <ul style="list-style-type: none"> 'Transitional waters (WFD)' 'Coastal waters (WFD)' 'Territorial waters' (0-12nm in most countries) 'EEZ (or similar) (e.g. Contiguous Zone, Fishing Zone, Ecological Protection Zone)': beyond territorial waters 'Continental shelf (beyond EEZ)' <p>This field gives only a coarse categorization of the areas (zones) covered by the exception. If only a proportion of the selected category is covered by the exception this can be reflected in the 'JustificationDescription'.</p>
Exception	MarineReportingUnit	Area(s) affected by the exception	Required Prefilled from first cycle	Enter all relevant Marine Reporting Units for the MS marine waters where the exception is applied (MarineUnitID, as reported by the Member State in 4geo.xml file).
Exception	JustificationDescription	A specific and substantiated justification for applying the exception, including the evidence used, the relevant aspects of the	Required	<p>Free text, preferably in English (max. 10 000 characters).</p> <p>Provide a substantiated justification for the exception. Specific requirements are noted below:</p>

Schema class	Schema field	Description	Property	Guidance
		marine environment affected (descriptors, features) and the areas affected		<p>Art. 14(1)(a): Justification to include relevant countries or international Competent Authorities. If notified under Article 15, provide date notified and letter, or indicate intention to provide a notification under Article 15.</p> <p>Art. 14(1)(d): Justification to include how it is ensured that achievement of GES is not permanently precluded/ compromised.</p> <p>Art. 14(1)(e): Justification to include the date by when GES is expected to be reached.</p> <p>Art. 14(4): Substantiate how there would be no further deterioration and demonstrate that the achievement of GES will not be permanently compromised.</p> <p>For disproportionate costs, specify which Descriptor(s) and Annex III elements are relevant.</p>
Exception	MeasuresAdHoc	List of the ad-hoc measures taken which are relevant for this exception	Conditional (if exception is notified under Art. 14(1) (b), (c) or (d))	If the exception is notified under Art. 14(1) (b), (c) or (d), provide a list of ad-hoc measures, from the measures reported in the 'Measures' schema.
Exception	Mitigation	Indicates the types of mitigation measures taken.	Conditional (if exception is notified under Art. 14(1) (b), (c) or (d))	<p>Free text (max. 2500 characters) to explain the consequences for other Member States in the relevant (sub)regions.</p> <p>If the exception is notified under Art. 14(1) (b), (c) or (d), substantiate how the ad-hoc measures aim to:</p> <ul style="list-style-type: none"> a. continue pursuing environmental targets and GES; b. prevent further deterioration in marine water status;

Schema class	Schema field	Description	Property	Guidance
				c. mitigate the adverse impact on marine waters of the (sub)region or of other Member States.
Exception	FurtherInformation	Provide the section(s) of the Summary report and, if relevant, a URL web link to a more detailed assessment of the Art. 14 exception.	Required Prefilled from first cycle	Free text (max. 2000 characters). Where the MS report refers to various reports which provide information used to support the assessment of the Article 14 exception, provide a URL web link to each report and where relevant to sections in those reports. The links should cover ALL the reports which the MS wishes to be considered as part of its Article 14 notification. This may include a 'roof report' of a Regional Sea Convention, if relevant, and the relevant reports under 2022 WFD reporting.

ANNEX II: QUALITY CONTROL PROCEDURES

Table 6: List of quality control procedures for measures schema

Table	Field	Description	Message	Error level
Reporter Info	CountryCode	Checks if the field is missing or empty	The value must not be missing or empty	BLOCKER
Reporter Info	ContactMail	Checks if the field is missing or empty	The value must not be missing or empty	BLOCKER
Reporter Info	ContactMail	Checks if the field is a valid EMAIL	The value does not follow the expected syntax for a valid email	BLOCKER
Reporter Info	ContactOrganisation	Checks if the field is missing or empty	The value must not be missing or empty	BLOCKER
Reporter Info	ReportingDate	Checks if the field is missing or empty	The value must not be missing or empty	BLOCKER
Reporter Info	ReportingDate	Checks if the field is a valid DATE	The value is not a valid date (YYYY-MM-DD)	BLOCKER
Measure	MeasureCode	Checks if the field is missing or empty	The value must not be missing or empty	BLOCKER
Measure	MeasureCode	Checks if MeasureCode is unique within table	Uniqueness and multiplicity constraints. The field MeasureCode must be unique within table	BLOCKER
Measure	MeasureName	Checks if the field is missing or empty	The value must not be missing or empty	BLOCKER
Measure	MeasureDescription	Checks if the field is greater than 5000 characters	Maximum 5000 characters	BLOCKER
Measure	UpdateType	Checks if the field is missing or empty	The value must not be missing or empty	BLOCKER
Measure	UpdateType	Checks if the field is in the code list: Measure same as in 2015 PoM; Measure modified since 2015 PoM; Measure new in 2021 PoM; 2015 measure that was not reported electronically	The value is not a valid member of the code list	BLOCKER
Measure	MeasureCategory	Checks if the field is missing or empty	The value must not be missing or empty	BLOCKER
Measure	MeasureCategory	Checks if the field is in the code list: 1.a, 1.b (non-WFD), 1b (WFD), 2.a, 2.b	The value is not a valid member of the code list	BLOCKER
Measure	PoliciesConventions	Checks if the field is missing or empty	The value must not be missing or empty	BLOCKER
Measure	PoliciesConventions	Checks if the field is in the code list: DirectivesConventions_Enum	The value is not a valid member of the code list	BLOCKER

GD18: reporting 2021 update of Art13-14, 2024 update of Art18

Table	Field	Description	Message	Error level
Measure	PolicyNational	Checks if the field is greater than 1000 characters	Maximum 1000 characters	BLOCKER
Measure	ResponsibleCompetentAuthority	Checks if the field is missing or empty and the MeasureCategory field is '2a' or '2b'	Provide the relevant Competent Authority(s)	BLOCKER
Measure	CoordinationLevel	Checks if the field is missing or empty and the MeasureCategory field is '2a' or '2b'	Provide level of coordination in implementation of the measure	BLOCKER
Measure	CoordinationLevel	Checks if the field is in the code list: Local, Sub-national, National, Bilateral, Sub-regional, Regional - HELCOM, Regional – OSPAR, Regional – UNEP/MAP, Regional – BSC, EU or International	The value is not a valid member of the code list.	BLOCKER
Measure	RegionalCooperation_countries	Checks if the field is missing or empty, the MeasureCategory field is '2a' or '2b' and the CoordinationLevel field is like 'Regional – X'	Provide other countries in the region involved in practical implementation of the measure	BLOCKER
Measure	RegionalCooperation_countries	Checks if the field is in the code list: CountryCode_Enum	The value is not a valid member of the code list.	BLOCKER
Measure	CEA	Checks if the field is missing or empty and the MeasureCategory field is '2a' or '2b'	Indicate whether a cost-effectiveness assessment for the measure was undertaken	BLOCKER
Measure	CEA	Checks if the field is in the code list: 'Yes', 'No' or 'Not needed'	The value is not a valid member of the code list	BLOCKER
Measure	CEAreference	Checks if the field is missing or empty and the CEA field is 'Yes'	Provide a reference in field 'CEAreference'	BLOCKER
Measure	CBA	Checks if the field is in the code list: 'Yes', 'No' or 'Not needed'	The value is not a valid member of the code list	BLOCKER
Measure	CBA	Checks if the field is missing or empty and the MeasureCategory field is '2a' or '2b'	Indicate whether a cost-benefit analyses, prior to the introduction of a new measure, was undertaken	BLOCKER
Measure	CBAreference	Checks if the field is missing or empty and the CBA field is 'Yes'	Provide a reference in field 'CBAreference'	BLOCKER
Measure	Financing	Checks if the field is missing or empty, the MeasureCategory field is '2a' or '2b', and UpdateType field is 'Measure new in 2021 PoM'	Provide a brief description of the state of securing funding to implement the measure, and the source of funding	BLOCKER
Measure	RegionSubregion	Checks if the field is missing or empty	The value must not be missing or empty	BLOCKER

GD18: reporting 2021 update of Art13-14, 2024 update of Art18

Table	Field	Description	Message	Error level
Measure	RegionSubregion	Checks if the field is in the code list: RegionSubregion_Enum	The value is not a valid member of the code list	BLOCKER
Measure	SpatialScope	Checks if the field is missing or empty	The value must not be missing or empty	BLOCKER
Measure	SpatialScope	Checks if the field is in the code list: SpatialScope_Enum	The value is not a valid member of the code list	BLOCKER
Measure	MarineReportingUnit	Checks if the field is missing or empty	The value must not be missing or empty	BLOCKER
Measure	MarineReportingUnit	Checks if the field contains a MRU reported previously	The value is not a valid member of the code list	BLOCKER
Measure	MeasurePurpose	Checks if the field is missing or empty	Indicate the main purpose of the measure	BLOCKER
Measure	MeasurePurpose	Checks if the field is in the code list: MeasurePurpose_Enum	The value is not a valid member of the code list	BLOCKER
Measure	Pressures	Checks if the field is missing or empty	The value must not be missing or empty	BLOCKER
Measure	Pressures	Checks if the field is in the code list: 'Pressure inputs to the marine environment' or from 'Physical and hydrological' pressure options in 'Pressures and impacts in the marine environment' in the Feature_Enum code list	The value is not a valid member of the code list	BLOCKER
Measure	RelevantKTMs	Checks if the field is missing or empty	The value must not be missing or empty	BLOCKER
Measure	RelevantKTMs	Checks if the field is in the code list: Key Types of Measures_Enum	The value is not a valid member of the code list	BLOCKER
Measure	RelevantTargets	Checks if the field is missing or empty	The value must not be missing or empty	BLOCKER
Measure	RelevantTargets	Checks if the field contains a Target reported previously or 'No specific target addressed'	The value is not a valid member of the reference list	BLOCKER
Measure	RelatedIndicator	Checks if the field is missing or empty and the MeasureCategory field is '1b (non-WFD)', '2a' or '2b'	Indicate the indicators relevant for assessing effectiveness of the measure	BLOCKER
Measure	RelatedIndicator	Checks if the field contains an indicator reported previously or 'No indicator'	The value is not a valid member of the reference list	BLOCKER
Measure	GEScomponent	Checks if the field is missing or empty	The value must not be missing or empty	BLOCKER
Measure	GEScomponent	Checks if the field is in the code list: GEScomponent_Enum	The value is not a valid member of the code list	BLOCKER

GD18: reporting 2021 update of Art13-14, 2024 update of Art18

Table	Field	Description	Message	Error level
Measure	Feature	Checks if the field is missing or empty	The value must not be missing or empty	BLOCKER
Measure	Feature	Checks if the field is in the code list: Feature_Enum (Ecosystem components, Pressures and impacts in the marine environment, Uses and human activities)	The value is not a valid member of the code list	BLOCKER
Measure	Element	Checks if the field is in the code list: Elements reference list	The value is not a valid member of the reference list	BLOCKER
Measure	ImplementationStatus	Checks if the field is missing or empty	The value must not be missing or empty	BLOCKER
Measure	ImplementationStatus	Checks if the field is in the code list: Implementation not started; Implementation started; Measure implemented; Measure ongoing; Measure withdrawn	The value is not a valid member of the code list	BLOCKER
Measure	TemporalScope	Checks if the field is missing or empty	The value must not be missing or empty	BLOCKER
Measure	TemporalScope	Checks if the field is a valid DATE range	The value is not a valid date range (YYYY-YYYY)	BLOCKER
Measure	ImplementationDelay	Checks if the field is a valid NUMBER - INTEGER	The value is not a valid whole number	BLOCKER
Measure	ImplementationReason	Checks if the field is missing or empty	The value must not be missing or empty	BLOCKER
Measure	ImplementationReason	Checks if the field is in the code list: ImplementationReason_Enum	The value is not a valid member of the code list	BLOCKER

Table 7: List of quality control procedures for exceptions schema

Table	Field	Description	Message	Error Level
Reporter Info	CountryCode	Checks if the field is missing or empty	The value must not be missing or empty	BLOCKER
Reporter Info	ContactMail	Checks if the field is missing or empty	The value must not be missing or empty	BLOCKER
Reporter Info	ContactMail	Checks if the field is a valid EMAIL	The value does not follow the expected syntax for a valid email	BLOCKER
Reporter Info	ContactOrganisation	Checks if the field is missing or empty	The value must not be missing or empty	BLOCKER
Reporter Info	ReportingDate	Checks if the field is missing or empty	The value must not be missing or empty	BLOCKER
Reporter Info	ReportingDate	Checks if the field is a valid DATE	The value is not a valid date (YYYY-MM-DD)	BLOCKER

GD18: reporting 2021 update of Art13-14, 2024 update of Art18

Table	Field	Description	Message	Error Level
Exceptions	Exception_code	Checks if the field is missing or empty	The value must not be missing or empty	BLOCKER
Exceptions	Exception_code	Checks if Exception_code is unique within table	Uniqueness and multiplicity constraints. The field Exception_code must be unique within table	BLOCKER
Exceptions	Exception_name	Checks if the field is missing or empty	The value must not be missing or empty	BLOCKER
Exceptions	ExceptionType	Checks if the field is missing or empty	The value must not be missing or empty	BLOCKER
Exceptions	ExceptionType	Checks if the field is in the code list: ExceptionType_Enum	The value is not a valid member of the code list	BLOCKER
Exceptions	ExceptionReason	Checks if the field is missing or empty and the ExceptionType field is 'Art. 14(1)(e)'	The value must not be missing or empty	BLOCKER
Exception	ExceptionReason	Checks if the field is in the code list: ExceptionReason_Enum	The value is not a valid member of the code list	BLOCKER
Exceptions	GESachieved	Checks if the field is missing or empty and the ExceptionType field is 'Art. 14(1)(e)'	Provide estimated date by when GES is expected to be achieved, for an Article 14(1)(e) exception.	BLOCKER
Exception	GESachieved	Checks if the field is a valid DATE	The value is not a valid date range (YYYY-YYYY)	BLOCKER
Exceptions	RelevantPressures	Checks if the field is missing or empty and field ExceptionType is 'Art.14(1)(a)', Art.14(1)(b), Art.14(1)(c) or Art.14(1)(d)	The value must not be missing or empty	BLOCKER
Exceptions	RelevantPressures	Checks if the field is in the code list: 'Pressure inputs to the marine environment' or physical and hydrological pressures from 'Pressures and impacts in the marine environment' in Features_Enum	The value is not a valid member of the code list	BLOCKER
Exceptions	RelevantTargets	Checks if the field is missing or empty and the ExceptionType field is NOT 'Art. 14(4)'	The value must not be missing or empty	BLOCKER
Exception	RelevantTargets	Checks if the field contains a Target reported previously or 'No specific target addressed'	The value is not a valid member of the reference list	BLOCKER
Exceptions	GEScomponent	Checks if the field is missing or empty	The value must not be missing or empty	BLOCKER
Exceptions	GEScomponent	Checks if the field is in the code list: 'GEScomponent'	The value is not a valid member of the code list	BLOCKER
Exceptions	RelevantFeatures	Checks if the field is missing or empty	The value must not be missing or empty	BLOCKER

GD18: reporting 2021 update of Art13-14, 2024 update of Art18

Table	Field	Description	Message	Error Level
Exceptions	RelevantFeatures	Checks if the field is in the code list: 'Ecosystem components' or 'Pressures and impacts in the marine environment' in Features_Enum	The value is not a valid member of the code list	BLOCKER
Exceptions	RegionSubregion	Checks if the field is missing or empty	The value must not be missing or empty	BLOCKER
Exception	RegionSubregion	Checks if the field is in the code list: RegionSubregion_Enum	The value is not a valid member of the code list	BLOCKER
Exceptions	Spatial_scope_geographic_zones	Checks if the field is missing or empty	The value must not be missing or empty	BLOCKER
Exceptions	Spatial_scope_geographic_zones	Checks if the field is in the code list: SpatialScope_Enum	The value is not a valid member of the code list	BLOCKER
Exceptions	MarineReportingUnit	Checks if the field is missing or empty	The value must not be missing or empty	BLOCKER
Measure	MarineReportingUnit	Checks if the field contains a MRU reported previously	The value is not a valid member of the code list	BLOCKER
Exceptions	JustificationDescription	Checks if the field is missing or empty	The value must not be missing or empty	BLOCKER
Exceptions	MeasuresAdHoc	Checks if the field is missing or empty and the ExceptionType field is 'Art. 14(1)(b)', 'Art. 14(1)(c)' or 'Art. 14(1)(d)'	Provide a list of the ad-hoc measures taken which are relevant for this exception	BLOCKER
Exceptions	Mitigation	Checks if the field is missing or empty and the ExceptionType field is 'Art. 14(1)(b)', 'Art. 14(1)(c)' or 'Art. 14(1)(d)'	If the exception is notified under Art. 14(1) (b), (c) or (d), substantiate how the ad-hoc measures aim to continue pursuing environmental targets and GES; prevent further deterioration in marine water status; and mitigate the adverse impact on marine waters of the (sub)region or of other Member States.	BLOCKER
Exceptions	FurtherInformation	Checks if the field is missing or empty	The value must not be missing or empty	BLOCKER