# Reporting at RBD/Sub-unit level for surface water (schema SWMET)

## Overview of reporting of methodologies for surface water bodies

Reporting of methodologies for surface water bodies is done for each RBD. For the purpose of presentation in this guidance, the contents of reporting are structured according to the following sub-chapters:

* Methodologies characterisation
* Methodologies classification of ecological status
* Methodologies classification of chemical status
* Overall management objectives (nutrients, river continuity)
* Definition of significant pressures and impacts
* Methodologies for exemptions

The following sections describe the contents of reporting. The UML diagram of the SWMET schema is found in Annex 10.5.

## Methodologies characterisation

### Introduction

Article 5 of the WFD requires Member States to identify surface water bodies that will be used for assessing progress with, and achievement of, the WFD’s Environmental Objectives. In addition, under certain conditions, Article 4(3) of the WFD permits Member States to identify and designate artificial water bodies (AWB) and heavily modified water bodies (HMWB). AWB and HMWB are required to achieve Good Ecological Potential (GEP) by 2015.

Identifying the size of surface water bodies was an important parameter that had implications on the design of the monitoring programmes and on the development of appropriate programmes of measures. A stepwise process for the identification of AWB and HMWB resulted in a provisional identification by 2004. Full identification should have been completed by 2010 for publication in the first RBMPs. The characterisation of surface water body types, including the identification of AWB and HMWB, may have been reviewed and revised as part of the review and update (if necessary) of the Article 5 analysis, required by December 2013.

Article 5 also requires Member States to analyse the characteristics of surface water bodies and to provide a summary report on surface water characterisation, including general information on their typology.

### How will the European Commission and the EEA use the information reported?

The European Commission will use the information provided to check that small water bodies received sufficient consideration when not delineated as such, and to check compliance in the designation of AWB and HMWB. Statistics and information will be provided to the European Parliament at EU level. Information will be provided to the public through WISE.

#### Products from Reporting

The European Commission will produce tables showing:

* an overview of how small water bodies have been covered by the different Member States and water categories

### Contents of the 2016 reporting

#### Schema sketch

See Annex 10.5.

#### Information and Data to be reported using the schemas

For each type of surface water body, report the following information:

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| **Schema: SWMET** |
| ***Class SWType***  ***Properties:*** *maxOccurs = unbounded minOccurs = 1* |
| **Schema element**:swTypeCode  **Field type / facets:** String100Type  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element:** Required. Member State code for the characterisation type of the water body, as reported for each water body in the surface water schema (SWB), and the RBMP and background documents. If typology for HMWBs and/or AWBs has been derived and used it should be reported here. This will allow reporting of e.g. physico-chemical standards linked to these types under the schema SWMET.  Details on the typologies are no longer requested but a brief description of the type is required in TypeName and reference to where further details can be found in the RBMP and background documents.  In the previous reporting exercise in 2010, some Member States reported more characterisation types than were subsequently reported with surface water bodies. Please ensure consistency in the data reported.  **Quality assurance checks:** Cross-schema check: The reported swTypeCode must be consistent with the codes reported in SWB/SurfaceWaterBody/surfaceWaterBodyTypeCode. |
| **Schema element**: swTypeDescription  **Field type / facets:** String1000Type  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Briefly describe the type (e.g. small, lowland, siliceous rivers). Provide a reference to where further details can be found in the RBMP and background documents. |
| **Schema element:** swIntercalibrationType  **Field type / facets:** SWIntercalibrationType\_Enum (see Annex 8a)  **Properties:** maxOccurs =unbounded minOccurs = 1  **Guidance on completion of schema element**: Required. If the surface water body type corresponds with an intercalibration type, report the intercalibration type code (not name).  The intercalibration type reported in this element must be appropriate to the surface water body’s Category.  If there is no corresponding intercalibration type, select ‘Not applicable’.  **Quality checks**: Cross-schema check: The reported intercalibrationType must be consistent with the codes reported in SWB/SurfaceWaterBody/surfaceWaterBodyIntercalibrationType |
| **Schema element**: swTypeCategory  **Field type / facets:** SWCategory\_Enum: RW, LW, TW, CW  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Report the category of surface water body to which this type refers.  ‘RW’ = River water body.  ‘LW’ = Lake water body.  ‘TW’ = Transitional water body.  ‘CW’ = Coastal water body. |
| **Schema element**:swTypeSpecificReferenceConditionsForBQEs  **Field type / facets:** AllSomeNone\_Enum: All, Some, None  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Indicate whether type-specific reference conditions have been established for this surface water type for all relevant BQEs:  ‘All’: Yes, reference conditions have been set for this type for all relevant BQEs  ‘Some’: Partly, reference conditions have been set for this type for some BQEs  ‘None’: No, reference conditions have not been set for this type for any BQEs |
| **Schema element**:swTypeSpecificReferenceConditionsForHyMoQEs  **Field type / facets:** AllSomeNone\_Enum: All, Some, None  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Indicate whether type-specific reference conditions have been established for this surface water type for all relevant hydromorphological QEs.  ‘All’: Yes, reference conditions have been set for this type for all relevant hydromorphological QEs  ‘Some’: Partly, reference conditions have been set for this type for some hydromorphological QEs  ‘None’: No, reference conditions have not been set for this type for any hydromorphological QEs |
| **Schema element**:swTypeSpecificReferenceConditionsForPhysChemQEs  **Field type / facets:**  AllSomeNone\_Enum: All, Some, None  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Indicate whether type-specific reference conditions have been established for this surface water type for all relevant physico-chemical QEs:  ‘All’: Yes, reference conditions have been set for this type for all relevant physico-chemical QEs  ‘Some’: Partly, reference conditions have been set for this type for some physico-chemical QEs  ‘None’: No, reference conditions have not been set for this type for any physico-chemical QEs |

The following class is used to report information on methodologies:

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| **Schema: SWMET (continued)** |
| ***Class SWMethodologies***  ***Properties:*** *maxOccurs = 1 minOccurs = 1* |
| **Schema element**:typologyMethodologyReference  **Field type / facets:** ReferenceType (see Annex 9)  **Properties:** maxOccurs =unbounded minOccurs = 1  **Guidance on completion of schema element**: Required. Provide references or hyperlinks to the documents and sections where relevant information relating to the typology methodology can be found. Guidance on what should be included in this document is provided in Section 7.2.3.3. |
| **Schema element**:smallWBsMethodologyReference  **Field type / facets:** ReferenceType (see Annex 9)  **Properties:** maxOccurs =unbounded minOccurs = 1  **Guidance on completion of schema element**: Required. Provide references or hyperlinks to the documents and sections where relevant information relating to the methodology for small water bodies can be found. Guidance on what should be included in this document is provided in Section 7.2.3.3. |
| **Schema element**:minimumCatchmentAreaRivers  **Field type / facets:** NumberDecimalType  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. If defined, state the minimum catchment area in km² for a river to be delineated as a water body in the RBMP. If not defined report -8888.  **Quality checks**:  Element check: Report -8888 if a minimum catchment area of rivers has not been defined. |
| **Schema element**:minimumSurfaceAreaLakes  **Field type / facets:** NumberDecimalType  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. If defined, state the minimum surface area in km² for a lake to be delineated as a water body in the RBMP. If not defined report -8888.  **Quality checks**:  Element check: Report -8888 if a minimum surface area of lakes has not been defined. |
| **Schema element**:otherMinimumCriteria  **Field type / facets:** String1000Type  **Properties:** maxOccurs =1 minOccurs = 0  **Guidance on completion of schema element**: Optional. If the minimum criteria used for the delineation of river water bodies is not based on catchment area, or for lake water bodies is not based on surface area, describe the criteria used. |
| **Schema element**: iRBDTypologyCoOrdinationReference  **Field type / facets:** ReferenceType (see Annex 9)  **Properties:** maxOccurs =unbounded minOccurs = 0  **Guidance on completion of schema element**: Conditional. Provide references or hyperlinks to the documents and sections where relevant information relating to the co-ordination of typology methodology in international RBDs can be found. Guidance on what should be included in this document is provided in Section 7.2.3.3.  **Quality checks**: Cross-schema check: Report if RBDSUCA/RBD/internationalRBD is ‘Yes’. |
| **Schema element**:hmwbMethodologyReference  **Field type / facets:** ReferenceType (see Annex 9)  **Properties:** maxOccurs =unbounded minOccurs = 1  **Guidance on completion of schema element**: Required. Provide references or hyperlinks to the documents and sections where any relevant information relating to the methodology for the designation of AWB and HMWB, can be found. Guidance on what should be included in this document is provided in Section 7.2.3.3. |

#### Guidance on contents of RBMPs/Background Documents

The following provides guidance on the aspects that the European Commission expects to find in the relevant chapters on methodologies in the RBMPs or in background documents. This guidance is not intended to be comprehensive in terms of what the Member States have to include in their RBMPs or background documents, rather to provide certain concrete elements of information that the European Commission expects to find.

**Typology**

* The background documents accompanying the RBMPs should include a detailed description of the typology methodology, with information on whether system A or B has been used, typology factors (descriptors) and related ranges, methods for testing typology versus biological data, and setting the type-specific reference conditions.
* Member States with a coastline where no transitional waters have been delineated should include a clear justification for this in these documents.
* For international RBDs, it should be indicated whether typology was co-ordinated with the Member States and third countries sharing the international RBD and, if so, how this co-ordination was achieved and the results. If the typology was not co-ordinated, provide reasons why, steps that have been taken to address this shortcoming and by when co-ordination will be achieved.

**Small water bodies**

* Describe the approach that has been taken to deal with small water bodies including information on the size threshold used for the delineation of water bodies for rivers, lakes and transitional waters.

**Reference conditions**

* Describe the reference conditions for all types and quality elements (biological, physico-chemical and hydromorphological). If there are gaps, identify them explicitly. Identify any quality elements which are not considered reliable for some types (under WFD Annex II section 1.3.vi) and explain the basis of information.

**Designation of HMWBs**

* Describe in detail the methodology for the designation of HMWBs, including:
  + Criteria used for the identification of substantial change in character. Thresholds should be included if they have been used (such as percentage, length or area of the water body affected by modification, the size of dams or impoundment).
  + Type of physical alterations considered for the designation of HMWB.
  + Criteria used for the assessment of significant adverse effect on the use. Indicate if thresholds have been used for the different water uses to define significant adverse effect (such as percentage of losses in energy production, agricultural production, and increase in risk of flooding).
  + List the water uses behind the designated HMWB and the number or percentage of water bodies for each use.
  + Explain how WFD Article 4(3)b has been applied (better environmental option). Which ‘other means’ have been considered for each water use. Describe all cases in which this assessment has concluded that there is a need to restore a water body and achieve the beneficial objectives through other means which are significantly better environmental options.

For further information, refer to the following CIS Guidance Documents:

* CIS Guidance Document No. 2: Identification of Water Bodies[[1]](#footnote-2)
* CIS Guidance Document No. 4: Identification and Designation of Heavily Modified and Artificial Water Bodies[[2]](#footnote-3)
* CIS Guidance Document No. 5: Transitional and Coastal Waters – Typology, Reference Conditions and Classification Systems[[3]](#footnote-4)
* CIS Guidance Document No. 10: Rivers and Lakes - Typology, Reference Conditions and Classification Systems[[4]](#footnote-5).

In addition, refer to the Intercalibration Official Decision[[5]](#footnote-6) and Technical Reports[[6]](#footnote-7).

#### Glossary: clarification of terms and reporting requirements

Wider environment:

WFD Article 4(3)(a)(i) refers to the ‘wider environment’. ‘Consequently a restricted definition of environment would not be appropriate and the environment is considered to include the natural environment and the human environment including archaeology, heritage, landscape and geomorphology’[[7]](#footnote-8).

## Methodologies classification ecological status and potential

### Introduction

Annex V of the WFD specifies how Member States are to monitor and present ‘status’ classification. The European Commission needs to ensure that ‘good status/potential’ has been defined according to the provisions of the Directive, and in a consistent and comparable way throughout the EU. The status requirements refer to all QEs in the Directive, chemical and biological. The normative provisions of Annex V provide a starting point. However, interpretation and application of these definitions may differ which may lead to a wide range of variation between the Member States. In this respect, it is important to compare the criteria and thresholds that Member States have set. Whilst it is recognised that the intercalibration exercise has set out to ensure that the definition of high and good ecological status is consistent, the intercalibration exercise will not result in the findings of whether the Member States have followed the results of intercalibration or whether class boundaries have been established for all required water body types and quality elements. However, the intercalibration exercise has provided a useful template for the collection of such information which has been used in the development of this WFD Reporting Guidance.

### How will the European Commission and the EEA use the information reported?

Information reported by Member States will be used to check whether Member States have established a status classification scheme in accordance with the WFD, and to determine whether status classes are consistent with the Directive, comprehensive, and comparable between Member States and RBDs. The comparison of assessment criteria and thresholds will make the level and ambition of environmental protection more transparent and will allow the identification of differences in assessment methods, in terms of whether they are comprehensive and comparable.

Statistics and information will be provided to the European Parliament at EU level. Information will be provided to the public through WISE.

#### Products from reporting

The following products will be produced:

* Table of assessment methods status – are methods available for each water category and type? For each BQE.
* Table of pressures to which the method is sensitive.
* Table of nutrient standards – are standards available for each water category and type? For each nutrient (level 3 + parameter name, e.g. Total Phosphorus)?

Statistics can also be derived of the main methodological approaches used by Member States.

### Contents of 2016 reporting

#### Schema sketch

See Annex 10.5.

#### Information and data to be reported using the schemas

The following class is used to report information on assessment methods for BQEs.

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| **Schema: SWMET (continued)** |
| ***Class BQEMethod***  ***Properties:*** *maxOccurs = unbounded minOccurs = 1* |
| **Schema element**:bqeMethodName  **Field type / facets:** String250Type  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Provide the name(s) of the assessment method(s) used for this BQE and category. The name(s) must be the same name(s) used in the RBMPs or background documents. |
| **Schema element**:bqeCode  **Field type / facets:** BQE\_Enum (see Annex 8h)  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Select the BQE for which the assessment method applies. |
| **Schema element**: bqeCategoryRW  **Field type / facets:**  YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs = 1 minOccurs = 1  **Guidance on completion of schema element**: Required. Does the assessment method apply to rivers? |
| **Schema element**: bqeCategoryLW  **Field type / facets:**  YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs = 1 minOccurs = 1  **Guidance on completion of schema element**: Required. Does the assessment method apply to lakes? |
| **Schema element**: bqeCategoryTW  **Field type / facets:**  YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs = 1 minOccurs = 1  **Guidance on completion of schema element**: Required. Does the assessment method apply to transitional waters? |
| **Schema element**: bqeCategoryCW  **Field type / facets:**  YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs = 1 minOccurs = 1  **Guidance on completion of schema element**: Required. Does the assessment method apply to coastal waters? |
| **Schema element**: bqePercentageOfTypes  **Field type / facets:** NumberDecimal0100Type  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Report the percentage of types for this BQE and category for which an assessment method is fully developed. |
| **Schema element**:bqeSensitivityImpactNutrients  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs = 1 minOccurs = 1  **Guidance on completion of schema element**: Required. Is the assessment method mainly sensitive to nutrient pollution? |
| **Schema element**:bqeSensitivityImpactOrganic  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs = 1 minOccurs = 1  **Guidance on completion of schema element**: Required. Is the assessment method mainly sensitive to organic pollution? |
| **Schema element**:bqeSensitivityImpactChemical  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs = 1 minOccurs = 1  **Guidance on completion of schema element**: Required. Is the assessment method mainly sensitive to chemical pollution? |
| **Schema element**:bqeSensitivityImpactSaline  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs = 1 minOccurs = 1  **Guidance on completion of schema element**: Required. Is the assessment method mainly sensitive to saline pollution? |
| **Schema element**:bqeSensitivityImpactAcidification  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs = 1 minOccurs = 1  **Guidance on completion of schema element**: Required. Is the assessment method mainly sensitive to acidification? |
| **Schema element**:bqeSensitivityImpactTemperature  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs = 1 minOccurs = 1  **Guidance on completion of schema element**: Required. Is the assessment method mainly sensitive to elevated temperatures? |
| **Schema element**:bqeSensitivityImpactHydrological  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs = 1 minOccurs = 1  **Guidance on completion of schema element**: Required. Is the assessment method mainly sensitive to altered habitats due to hydrological changes? |
| **Schema element**:bqeSensitivityImpactMorphological  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs = 1 minOccurs = 1  **Guidance on completion of schema element**: Required. Is the assessment method mainly sensitive to altered habitats due to morphological changes? |
| **Schema element**:bqeSensitivityImpactOther  **Field type / facets:** String100Type  **Properties:** maxOccurs = 1 minOccurs = 0  **Guidance on completion of schema element**: Optional. If relevant, report any other impact to which the assessment method is mainly sensitive that is not covered in the previous questions. |

The following class is used to report information on assessment methods for supporting QEs.

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| **Schema: SWMET (continued)** |
| ***Class SWSupportingQE***  ***Properties:*** *maxOccurs = unbounded minOccurs = 1* |
| **Schema element**:supportingQECode  **Field type / facets:** SupportingQE\_Enum (see Annex 8h):  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Select each supporting hydromorphological and physico-chemical QE in turn from the enumeration list and report the information in each of the following schema elements for each supporting QE. |
| **Schema element**: supportingQECategoryRW  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs = 1 minOccurs = 1  **Guidance on completion of schema element**: Required. Is this supporting QE assessed in terms of ecological status/potential in rivers? |
| **Schema element**: supportingQECategoryLW  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs = 1 minOccurs = 1  **Guidance on completion of schema element**: Required. Is this supporting QE assessed in terms of ecological status/potential in lakes? |
| **Schema element**: supportingQECategoryTW  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs = 1 minOccurs = 1  **Guidance on completion of schema element**: Required. Is this supporting QE assessed in terms of ecological status/potential in transitional waters? |
| **Schema element**: supportingQECategoryCW  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs = 1 minOccurs = 1  **Guidance on completion of schema element**: Required. Is this supporting QE assessed in terms of ecological status/potential in coastal waters? |
| **Schema element**: supportingQESensitivityBQE  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Indicate whether the classification boundaries for this supporting QE are related to the class boundaries for the sensitive BQEs. |

The following class is used to report information on standards for general physico-chemical QEs including nutrients.

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| **Schema: SWMET (continued)** |
| ***Class SWPhysicoChemicalQE***  ***Properties:*** *maxOccurs = unbounded minOccurs = 1* |
| **Schema element**:physChemQECode  **Field type / facets:** PhysChemQE\_Enum (see Annex 8h):  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Select each physico-chemical QE at the level 4 of aggregation in turn from the enumeration list and report the information in each of the following schema elements for each QE. If the QE for which there is a standard is not included the enumeration list please select the most relevant ‘Other’ QE and describe in more detail in physChemQEOther. |
| **Schema element**:physChemQEOther  **Field type / facets:** String100Type  **Properties:** maxOccurs = 1 minOccurs = 0  **Guidance on completion of schema element**: Conditional. Report details of the physico-chemical QE for which there is a standard if it is not included the enumeration list in physChemQECode.  **Quality checks**: Conditional check: Report if physChemQECode is ‘QE3-1-1-2 Other determinand for transparency’, ‘QE3-1-2-2 Other determinand for thermal conditions’, ‘QE3-1-3-3 Other determinand for oxygenation conditions’, ‘QE3-1-4-2 Other determinand for salinity’, ‘QE3-1-5-2 Other determinand for acidification status’ or ‘QE3-1-6-9 Other determinand for nutrient conditions’. |
| **Schema element**: physChemCategoryRW  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs = 1 minOccurs = 1  **Guidance on completion of schema element**: Required. Does this physico-chemical standard apply to rivers? |
| **Schema element**: physChemCategoryLW  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs = 1 minOccurs = 1  **Guidance on completion of schema element**: Required. Does this physico-chemical standard apply to lakes? |
| **Schema element**: physChemCategoryTW  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs = 1 minOccurs = 1  **Guidance on completion of schema element**: Required. Does this physico-chemical standard apply to transitional waters? |
| **Schema element**: physChemCategoryCW  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs = 1 minOccurs = 1  **Guidance on completion of schema element**: Required. Does this physico-chemical standard apply to coastal waters? |
| **Schema element**:physChemTypeCode  **Field type / facets:** String100Type  **Properties:** maxOccurs = unbounded minOccurs = 1  **Guidance on completion of schema element**: Required. For each standard, report the Member State code for the characterisation type of the water body, as reported in the surface water characterisation schema (in schema element surfaceWaterBodyTypeCode), and the RBMP and background documents.  If the standard applies to all national types, please enter ‘All’ (in English). More than one type can be added for the same standard value.  If the types used in the derivation of physico-chemical standards are different from those used in the assessment of BQEs, please enter the specific national physico-chemical types. If so, please ensure the specific methodology document relating to the derivation of standards (and in particular how it is ensured that all biological types are covered by the standards) is uploaded to WISE or made available on the web.  **Quality checks**: Within-schema check: The reported physChemTypeCode must be consistent with the codes reported in SWMET/SWType/swTypeCode or the entry ‘All’. |

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| **Schema element**:physChemValue  **Field type / facets:** String20Type  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Report the value or range of the physico-chemical standard representing the good-moderate boundary only. |
| **Schema element**:physChemUnit  **Field type / facets:** UnitOfMeasure\_Enum (see Annex 8f)  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Report the unit of the physico-chemical standard. If ‘Other’ is selected then provide more information on the unit in physChemUnitOther. |
| **Schema element**:physChemUnitOther  **Field type / facets:** String10Type  **Properties:** maxOccurs =1 minOccurs = 0  **Guidance on completion of schema element**: Conditional. Report if the unit of the physico-chemical standard is reported as ‘Other’ in physChemUnit.  **Quality checks**: Conditional check: Report if physChemUnit is ‘Other’. |
| **Schema element**:physChemStandardType  **Field type / facets:** : PhysChemStandardType\_Enum: AA-EQS, MAC-EQS, 95 Percentile, Other  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Select the type of physico-chemical standard applied.  ‘AA-EQS’ = Annual Average EQS  ‘MAC-EQS’ = Maximum Allowable Concentration EQS  ’95th percentile’ = 95th percentile  ‘Other’ = Other |
| **Schema element**: physChemStandardOther  **Field type / facets:** String10Type  **Properties:** maxOccurs =1 minOccurs = 0  **Guidance on completion of schema element**: Conditional. Report if the type of physico-chemical standard applied is reported as ‘Other’ in physChemStandardType.  **Quality checks**: Conditional check: Report if physChemStandardType is ‘Other’. |
| **Schema element**:physChemGMBoundary  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Indicate whether the physico-chemical standard is consistent to the good-moderate status boundary of the relevant sensitive BQEs. |

The following class is used to report each good-moderate EQS for each River Basin Specific Pollutant (previously known as QE3-3 Non-Priority Specific Pollutants and QE3-4 Other National Pollutants in the 2010 reporting exercise).

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| **Schema: SWMET (continued)** |
| ***Class SWRBSP***  ***Properties:*** *maxOccurs = unbounded minOccurs = 1* |
| **Schema element**:rbspCode  **Field type / facets:** RBSP\_Enum (see Annex 8b)  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Select each River Basin Specific Pollutant (RBSP) with a good-moderate EQS from the enumeration list. If there is more than one standard per substance (e.g. because there are different standards for different categories or matrices), the same RBSP can be introduced more than once. |
| **Schema element**:rbspOther  **Field type / facets:** string100Type  **Properties:** maxOccurs =1 minOccurs = 0  **Guidance on completion of schema element**: Conditional. If ‘rbspCode’ is ‘EEA\_00-00-0 - Other chemical parameter’ please indicate in this field the CAS number (if relevant) and the name of the RBSP.  **Quality check**: Conditional check: report if ‘rbspCode’ is ‘EEA\_00-00-0 - Other chemical parameter’. |
| **Schema element**:rbspMatrix  **Field type / facets:** Matrix\_Enum:  Water  Biota  Biota - fish  Biota - other  Sediment  Sediment - settled sediment  Sediment - suspended sediment  **Properties:** maxOccurs = 1 minOccurs = 1  **Guidance on completion of schema element**: Required. Select the matrix in which the standard for the RBSP is applied for the purpose of assessment of ecological status. |
| **Schema element**: rbspCategoryRW  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs = 1 minOccurs = 1  **Guidance on completion of schema element**: Required. Does the standard apply to rivers? |
| **Schema element**: rbspCategoryLW  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs = 1 minOccurs = 1  **Guidance on completion of schema element**: Required. Does the standard apply to lakes? |
| **Schema element**: rbspCategoryTW  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs = 1 minOccurs = 1  **Guidance on completion of schema element**: Required. Does the standard apply to transitional waters? |
| **Schema element**: rbspCategoryCW  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs = 1 minOccurs = 1  **Guidance on completion of schema element**: Required. Does the standard apply to coastal waters? |
| **Schema element**:rbspStandardType  **Field type / facets:** EQStandardType\_Enum  AA-EQS  MAC-EQS  Both  Other  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Select the type of standard applied for each RBSP and matrix.  ‘AA-EQS’ = Annual Average EQS.  ‘MAC-EQS’ = Maximum Allowable Concentration EQS.  ‘Both’ = Both AA and MAC EQS  ‘Other’ = Other type of standard |
| **Schema element**:rbspValue  **Field type / facets:** String100Type  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. For every combination of RBSP, matrix, standard type and category, report the value or range of the RBSP standard representing the good-moderate boundary only. |
| **Schema element**:rbspUnit  **Field type / facets:** UnitOfMeasure\_Enum (see Annex 8f)  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Report the unit of the RBSP standard. |
| **Schema element**:rbspScale  **Field type / facets:** GeographicalScale\_Enum (see Annex 8l)  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Report the geographical scale at which the RBSP standard is applied. |
| **Schema element**:rbspTechGuidance  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Indicate whether the RBSP standard has been derived in accordance with the 2011 Technical Guidance Document No 27[[8]](#footnote-9). |
| **Schema element**:rbspAnalyticalMethod  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Indicate whether the analytical method used meets the minimum performance criteria laid down in Article 4.1 of the QA/QC Directive (2009/90/EC)[[9]](#footnote-10) for the strictest standard applied.  See Section 7.4.1 on fulfilment of the QA/QC Directive. |
| **Schema element**:rbspAnalyticalMethodBAT  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs =1 minOccurs = 0  **Guidance on completion of schema element**: Conditional. If the analytical method does not meet the minimum performance criteria laid down in Article 4.1 of the QA/QC Directive, indicate whether the analytical method complies with the requirements laid down in Article 4.2 of the QA/QC Directive (2009/90/EC)[[10]](#footnote-11) for the strictest standard applied. |

The following class is used to report targeted questions on the classification of ecological status and the definition of good ecological potential (GEP).

|  |
| --- |
| **Schema: SWMET (continued)** |
| ***Class SWTargetedQ***  ***Properties:*** *maxOccurs = 1 minOccurs = 1* |
| **Schema element**:oneOutAllOut  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Indicate whether the ‘one-out, all-out’ principle been applied in deriving the overall classification of the ecological status of a water body. |
| **Schema element**:groupingExtrapolation  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Indicate whether the grouping of water bodies has been used in extrapolating the assessment and classification of ecological status from monitored water bodies to those water bodies with no monitoring sites. |
| **Schema element**:gepDefined  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Indicate whether good ecological potential (GEP) has been defined. |
| **Schema element**:gepLevel  **Field type / facets:** GEPLevel\_Enum:  At water body level  For groups of HMWBs/AWBs of the same use/physical modification  Other approach  **Properties:** maxOccurs =1 minOccurs = 0  **Guidance on completion of schema element**: Conditional. Indicate at what level GEP has been defined.  **Quality checks**: Conditional check: Report if gepDefined is ‘Yes’. |
| **Schema element**: gepApproach  **Field type / facets:** GEPApproach\_Enum:  CIS Guidance Approach  Mitigation Measures (Prague) Approach  Hybrid CIS/Prague Approach.  **Properties:** maxOccurs =1 minOccurs = 0  **Guidance on completion of schema element**: Conditional. Report the approach that has been adopted for defining GEP.  **Quality checks**: Conditional check: Report if gepDefined is ‘Yes’. |
| **Schema element**:gepBiology  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs =1 minOccurs = 0  **Guidance on completion of schema element**: Conditional. Indicate whether GEP has been defined in terms of biology (BQEs).  **Quality checks**: Conditional check: Report if gepDefined is ‘Yes’. |
| **Schema element**:mitigationMeasures  **Field type / facets:** MitigationMeasure\_Enum (see Annex 8m)  **Properties:** maxOccurs = unbounded minOccurs = 0  **Guidance on completion of schema element**: Conditional. Select the mitigation measures without significant adverse effects on the use or the wider environment from the enumeration list that have been identified to define GEP. More than one mitigation measure may be selected.  **Quality checks**: Conditional check: Report if gepDefined is ‘Yes’. |
| **Schema element**:bqeForMEPGEP  **Field type / facets:** BQE\_Enum (see Annex 8h):  **Properties:** maxOccurs = unbounded minOccurs = 0  **Guidance on completion of schema element**: Conditional. Select the BQEs from the enumeration list for which biological values were derived to define MEP and GEP. More than one BQE may be selected.  **Quality checks**: Conditional check: Report if gepDefined is ‘Yes’. |
| **Schema element**:gesGepComparison  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs =1 minOccurs = 0  **Guidance on completion of schema element**: Conditional. Indicate whether good ecological status (GES) and GEP have been compared, e.g. measured on a common scale[[11]](#footnote-12).  If ‘Yes’, provide a document describing the comparison that has been carried out.  If ‘No’, provide a document explaining why a comparison has not been carried out.  Provide a reference or hyperlink to the relevant document and section where specific information can be found. This information must be uploaded to WISE or made available on the web.  Guidance on the naming of files and documents to be uploaded to WISE is included in the user manual for reporting to WISE (see Annex 6).  If a hyperlink to information stored on a Member State’s server is reported, the Member State must guarantee that the hyperlink will remain stable and active for a period of 6 years after reporting, and that the information referred to will not be revised or updated.  **Quality checks**: Conditional check: Report if gepDefined is ‘Yes’. |
| **Schema element**:ecologicalStatusMethodReference  **Field type / facets:** ReferenceType (see Annex 9)  **Properties:** maxOccurs =unbounded minOccurs = 1  **Guidance on completion of schema element**: Required. Provide references or hyperlinks to technical documents describing the methodologies used for the assessment of ecological status. Guidance on what should be included in this document is provided in Section 7.3.3.3. |
| **Schema element**:gepMethodReference  **Field type / facets:** ReferenceType (see Annex 9)  **Properties:** maxOccurs =unbounded minOccurs = 1  **Guidance on completion of schema element**: Required. Provide references or hyperlinks to technical documents describing the methodologies used for the assessment of ecological potential. Guidance on what should be included in this document is provided in Section 7.3.3.3. |
| **Schema element**:driversFailureEcologicalStatusPotentialReference  **Field type / facets:** ReferenceType (see Annex 9)  **Properties:** maxOccurs =unbounded minOccurs = 1  **Guidance on completion of schema element**: Required. Provide references or hyperlinks to technical documents describing the drivers and impacts behind the failures of good ecological status and potential. Guidance on what should be included in this document is provided in Section 7.3.3.3. |

#### Guidance on contents of RBMPs/background documents

The following provides guidance on the aspects that the European Commission expects to find in the relevant chapters on methodologies in the RBMPs or in background documents. This guidance is not intended to be comprehensive in terms of what the Member States have to include in their RBMPs or background documents, rather to provide certain concrete elements of information that the European Commission expects to find.

**Development of ecological status methods**

* Method for the aggregation of monitoring data from different monitoring sites within a surface water body to derive an overall assessment of status.
* Methodology to deal with the no-deterioration objective when classifying surface water bodies, in particular for water bodies close to the high/good or good/moderate boundaries and considering the development of pressures on the water body.
* Development of fully WFD compliant assessment methods for the biological, hydromorphological and physico-chemical QEs.
* Remaining gaps and inconsistences in assessment methods described, with plans identified for their resolution.
* Major changes between the first and second RBMPs in the assessment methodology of ecological status.
* Methods used for translating the results from intercalibrated types to all other national types.
* Description of the application of the ‘one-out, all-out’ principle. If this has not been applied, a detailed justification and description of the alternative procedure that has been used must be provided.
* Metholodology for the grouping of surface water bodies and deriving status of non-monitored water bodies.
* Methods for assessing the confidence and precision of the different parts of the classification system; confidence and precision achieved; and plans in place to improve the level of confidence and precision, if any.
* Methodology for the selection of River Basin Specific Pollutants (RBSP).

**Development of GEP**

* Information on the comparison between the Prague Approach and the CIS Approach for the identification of GEP, if this has been done.
* Information on the mitigation measures that have been identified to achieve GEP and the ecological changes or improvements expected to be achieved.
* Information on how the slight deviation of GEP from MEP has been defined in terms of biological values (CIS Approach) or excluded mitigation measures (Prague Approach).
* Information on the comparison of GES and GEP, if this has been done.
* A description of the ecological changes that the mitigation measures are designed to achieve.
* Clarification in terms of which ecological improvements will be achieved by implementing the selected mitigation measures for reaching GEP.

**Drivers and impacts behind failure**

Include the following table in the RBMP or background document on the drivers and impacts behind the failure of ecological status. The cells should contain the number of surface water bodies failing due to the relevant driver and impact. Surface water bodies may fail due to more than one combination of drivers and impacts and, therefore, the reported values when summed are not expected to equate to the total number of failing surface water bodies. Ideally, this table should be developed for each surface water category (or at least differentiating coastal waters from the other surface water categories).

| **Impact / Driver** | Agri-culture | Climate change | Energy hydro-power | Energy non-hydro-power | Fisheries and aqua-culture | Flood protection | Forestry | Industry | Tourism and recreation | Transport | Urban development | Unknown/ Other |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| N pollution |  |  |  |  |  |  |  |  |  |  |  |  |
| P pollution |  |  |  |  |  |  |  |  |  |  |  |  |
| Organic pollution |  |  |  |  |  |  |  |  |  |  |  |  |
| Chemical pollution |  |  |  |  |  |  |  |  |  |  |  |  |
| Saline pollution |  |  |  |  |  |  |  |  |  |  |  |  |
| Acidification |  |  |  |  |  |  |  |  |  |  |  |  |
| Elevated temperatures |  |  |  |  |  |  |  |  |  |  |  |  |
| Altered habitats due to hydrological changes |  |  |  |  |  |  |  |  |  |  |  |  |
| Altered habitats due to morphological changes |  |  |  |  |  |  |  |  |  |  |  |  |
| Microbiological pollution |  |  |  |  |  |  |  |  |  |  |  |  |
| Other significant impacts |  |  |  |  |  |  |  |  |  |  |  |  |

There will be cases where data and information are not available to produce this kind of table. This may be particularly the case for certain pressures which are more difficult to quantify and/or in complex RBDs subject to many pressures where it is difficult to disaggregate the pressure-measure relationships.

On this basis, Member States are requested to report data and information to the best extent possible and, for the pressures, where this information is available or can be derived on the basis of reasonable efforts. In this regard, lack of reporting of this information does not imply a failure to comply with the WFD obligations.

References:

For further information, refer to the following CIS Guidance Documents:

* CIS Guidance Document No. 2: Identification of Water Bodies[[12]](#footnote-13)
* CIS Guidance Document No. 4: Identification and Designation of Heavily Modified and Artificial Water Bodies[[13]](#footnote-14)
* CIS Guidance Document No. 5: Transitional and Coastal Waters – Typology, Reference Conditions and Classification Systems[[14]](#footnote-15)
* CIS Guidance Document No. 10: Rivers and Lakes - Typology, Reference Conditions and Classification Systems.[[15]](#footnote-16)
* CIS Guidance Document No. 13: Overall Approach to the Classification of Ecological Status and Ecological Potential[[16]](#footnote-17)

## Methodologies classification chemical status

### Introduction

The legislation covering the assessment of chemical status is presented in detail in the introduction to Section 2.5.

Annex V of the WFD specifies how Member States are to monitor and present chemical status classification. The European Commission needs to ensure that chemical status has been addressed according to the provisions of the Directive, and in a consistent and comparable way throughout the EU. The normative provisions of Annex V provide a starting point. However, interpretation and application of these provisions may differ, which may lead to a wide range of variation between the Member States. It is, therefore, important to be able to compare the criteria and thresholds that Member States have applied.

The RBMPs should include information at RBD level on trend monitoring according to Article 3(3) of the Environmental Quality Standards Directive (Directive 2008/105/EC)[[17]](#footnote-18) and on the designation of mixing zones according to Article 4. Where a Member State has designated mixing zones, the RBMP must include a description of:

* The approaches and methodologies applied to define such zones.
* The measures taken with a view to reducing the extent of the mixing zones in the future.

### How will the European Commission and the EEA use the information reported?

Information reported by Member States on will be used by the European Commission to establish whether Member States have properly implemented the requirements of the WFD and EQSD in relation to the application of EQSs for Priority Substances, trend monitoring and the implementation of the provisions relating to mixing zones. Statistical tables of the main methodological methods used will be produced.

Statistics and information will be provided to the European Parliament at EU wide level. Information will be provided to the public through WISE.

### Contents of the 2016 reporting

#### Schema sketch

See Annex 10.5.

#### Information and data to be reported using the schemas

Provide information on all the standards used for the assessment of chemical status for all substances. This part of the schema will make reference to the values from the version of Directive 2008/105/EC87 in force on 13 January 2009, except for the AA-EQS for naphthalene in transitional and coastal waters, which will be from the version of that Directive in force since 14 September 2013[[18]](#footnote-19).

|  |
| --- |
| **Schema: SWMET (continued)** |
| ***Class SWPrioritySubstance***  ***Properties:*** *maxOccurs = unbounded minOccurs = 1* |
| **Schema element**:psCode  **Field type / facets:** PS\_Enum (see Annex 8d)  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. There will be one entry per Priority Substance. Report the information in each of the following schema elements for each Priority Substance.  **Quality checks:** Within-schema check: there should be at least 1 entry per priority substance (except for aldrin, dieldrin, endrin, isodrin and Total PAHs that do not need to be reported here – instead it needs to be reported Total aldrin+dieldrin+endrin+isodrin and individual PAHs in the Annex 1 to the EQS Directive). |
| **Schema element**:psStatusAssessment  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Indicate whether the Priority Substance has been used in the assessment of chemical status. |
| **Schema element**:psStandardsUsed  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. For each Priority Substance indicate whether the only standards used are all the relevant ones from the version of Directive 2008/105/EC in force on 13 January 2009, except for the AA-EQS for naphthalene in transitional and coastal waters, which will be from the version of that Directive in force since 14 September 2013. If alternative or additional standards (for the same or other matrix, for particular water categories) are used for that substance reply 'No'. If all and no other standard than those in the EQSD are used reply 'Yes'.  In case alternative and/or additional standards are used for a particular substance Member States are required to report all the standards used for the particular Priority Substance using the schema elements below. |
| **Schema element**:psMatrix  **Field type / facets:** Matrix\_Enum:  Water  Biota  Biota - fish  Biota - other  Sediment  Sediment - settled sediment  Sediment - suspended sediment  **Properties:** maxOccurs =1 minOccurs = 0  **Guidance on completion of schema element**: Conditional. Select the matrix in which the standard for the Priority Substance is applied for the purpose of assessment of chemical status.  **Quality checks**: Conditional check: report if psStandardsUsed is 'No'. |
| **Schema element**: psCategoryRW  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs =1 minOccurs = 0  **Guidance on completion of schema element**: Conditional. Is this standard used for the assessment of chemical status in rivers?  **Quality checks**: Conditional check: report if psStandardsUsed is 'No'. |
| **Schema element**: psCategoryLW  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs =1 minOccurs = 0  **Guidance on completion of schema element**: Conditional. Is this standard used for the assessment of chemical status in lakes?  **Quality checks**: Conditional check: report if psStandardsUsed is 'No'. |
| **Schema element**: psCategoryTW  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs =1 minOccurs = 0  **Guidance on completion of schema element**: Conditional. Is this standard used for the assessment of chemical status in transitional waters?  **Quality checks**: Conditional check: report if psStandardsUsed is 'No'. |
| **Schema element**: psCategoryCW  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs =1 minOccurs = 0  **Guidance on completion of schema element**: Conditional. Is this standard used for the assessment of chemical status in coastal waters?  **Quality checks**: Conditional check: report if psStandardsUsed is 'No'. |
| **Schema element**: psCategoryTeW  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs =1 minOccurs = 0  **Guidance on completion of schema element**: Conditional. Is this standard used for the assessment of chemical status in territorial waters?  **Quality checks**: Conditional check: report if psStandardsUsed is 'No'. |
| **Schema element**:psStandardType  **Field type / facets:** EQStandardType\_Enum:  AA-EQS  MAC-EQS  Both  Other  **Properties:** maxOccurs =1 minOccurs = 0  **Guidance on completion of schema element**: Conditional.Select the type of standard applied for each Priority Substance and matrix.  ‘AA-EQS’ = Annual Average EQS.  ‘MAC-EQS’ = Maximum Allowable Concentration EQS.‘Both’ = Both AA and MAC EQS  ‘Other’ = Other type of standard **Quality check**: Conditional check: report if psStandardsUsed is 'No'. |
| **Schema element**:psValue  **Field type / facets:** String20Type  **Properties:** maxOccurs =1 minOccurs = 0  **Guidance on completion of schema element**: Conditional. For every combination of Priority Substance, matrix, standard type and category, report the value or range of the standard applied.  **Quality checks**: Conditional check: report if psStandardsUsed is 'No'. |
| **Schema element**:psUnit  **Field type / facets:** UnitOfMeasure\_Enum (see Annex 8f)  **Properties:** maxOccurs =1 minOccurs = 0  **Guidance on completion of schema element**: Conditional. Report the unit of the Priority Substance standard.  **Quality checks**: Conditional check: report if psStandardsUsed is 'No'. |
| **Schema element**:psScale  **Field type / facets:** GeographicalScale\_Enum (see Annex 8l)  **Properties:** maxOccurs =1 minOccurs = 0  **Guidance on completion of schema element**: Conditional. Report the level at which the standard has been set.  **Quality checks**: Conditional check: report if psStandardsUsed is 'No'. |
| **Schema element**:psAnalyticalMethod  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Indicate whether the analytical method used meets the minimum performance criteria laid down in Article 4.1 of the QA/QC Directive (2009/90/EC)[[19]](#footnote-20) for the strictest standard applied.  See Section 7.4.1 on fulfilment of the QA/QC Directive. |
| **Schema element**: psAnalyticalMethodBAT  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs =1 minOccurs = 0  **Guidance on completion of schema element**: Conditional. If the analytical method does not meet the minimum performance criteria laid down in Article 4(1) of the QA/QC Directive, indicate whether the analytical method complies with the requirements laid down in Article 4.2 of the QA/QC Directive ([2009/90/EC](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:201:0036:0038:EN:PDF))89 for the strictest standard applied.  **Quality checks**: Conditional check: Report if psAnalyticalMethod is ‘No’. |

The following class is used to provide information on the methodology for the classification of chemical status at the level of the RBD.

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| **Schema: SWMET (continued)** |
| ***Class SWChemicalStatusClassificationRBD***  ***Properties:*** *maxOccurs = 1 minOccurs = 1* |
| **Schema element**: percentageSWBNotMonitoredChemical  **Field type / facets:** NumberDecimal0100Type  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Report the overall percentage of surface water bodies (for all categories) for which there is no monitoring of chemical status. |
| **Schema element**: approachSWBNotMonitoredChemical  **Field type / facets:** ApproachSWBNotMonitoredChemical\_Enum:  Not relevant as all surface water bodies have been sufficiently monitored for chemical status  Surface water bodies not monitored for chemical status are reported as good status  Surface water bodies not monitored for chemical status are reported as unknown status  The status of surface water bodies not monitored for chemical status has been derived or extrapolated from monitoring available for comparable water bodies  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Report the approach taken for the assessment of chemical status in surface water bodies which have not been monitored. |
| **Schema element**:approachSWBNotMonitoredChemicalReference  **Field type / facets:** ReferenceType (see Annex 9)  **Properties:** maxOccurs =unbounded minOccurs = 0  **Guidance on completion of schema element**: Conditional. If the assessment of chemical status of surface water bodies which have not been monitored is derived or extrapolated from monitoring in other comparable surface water bodies, provide references or hyperlinks to technical documents describing how the assessment of chemical status was carried out. Guidance on what should be included in this document is provided in Section 7.4.3.3.  **Quality checks**: Conditional check: Report if approachSWBNotMonitoredChemical is ‘The status of surface water bodies not monitored for chemical status has been derived or extrapolated from monitoring available for comparable water bodies’. |
| **Schema element**:limitOfQuantification  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Indicate whether the method of dealing with measurements lower than the limit of quantification is as specified in Article 5 of the QA/QC [Directive (2009/90/EC](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:201:0036:0038:EN:PDF))? |
| **Schema element**:backgroundConcentrations  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Indicate whether natural background concentrations for metals and their compounds are taken into consideration where such concentrations prevent compliance with the relevant EQS. |
| **Schema element**:backgroundConcentrationsReference  **Field type / facets:** ReferenceType (see Annex 9)  **Properties:** maxOccurs =unbounded minOccurs = 0  **Guidance on completion of schema element**: Conditional. If natural background concentrations for metals and their compounds are taken into consideration where such concentrations prevent compliance with the relevant EQS, provide references or hyperlinks to technical documents where further specific information can be found, particularly the list of metals concerned. Guidance on what should be included in this document is provided in Section 7.4.3.3.  **Quality checks**: Conditional check: Report if backgroundConcentrations is ‘Yes’. |
| **Schema element**:bioavailability  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Indicate whether hardness, pH, dissolved organic carbon or other water quality parameters that affect the bioavailability of metals are taken into consideration when assessing monitoring results against relevant EQSs. |
| **Schema element**:bioavailabilityReference  **Field type / facets:** ReferenceType (see Annex 9)  **Properties:** maxOccurs =unbounded minOccurs = 0  **Guidance on completion of schema element**: Conditional. If water quality parameters affecting the bioavailability of metals are taken into consideration when assessing monitoring results against relevant EQSs, provide references or hyperlinks to technical documents where further specific information can be found, particularly the list of metals concerned. Guidance on what should be included in this document is provided in Section 7.4.3.3.  **Quality checks**: Conditional check: Report if bioavailability is ‘Yes’. |
| **Schema element**:longTermTrendAnalysis  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Indicate whether arrangements are in place for the long-term trend analysis of concentrations of those Priority Substances listed in Part A of Annex I of the EQS Directive 2008/105/EC[[20]](#footnote-21) that tend to accumulate in sediment and/or biota (Article 3(3) EQSD). |
| **Schema element**:longTermTrendAnalysisReference  **Field type / facets:**  ReferenceType (see Annex 9)  **Properties:** maxOccurs =unbounded minOccurs = 0  **Guidance on completion of schema element**: Conditional. If arrangements are in place for the long-term trend analysis of concentrations of those Priority Substances listed in Part A of Annex I of the EQS Directive 2008/105/EC that tend to accumulate in sediment and/or biota (Article 3(3) EQSD), provide references or hyperlinks to technical documents where further specific information can be found, particularly the list of Priority Substances concerned. Guidance on what should be included in this document is provided in Section 7.4.3.3.  **Quality checks**: Conditional check: Report if longTermTrendAnalysis is ‘Yes’. |
| **Schema element**:mixingZoneDesignation  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Indicate whether mixing zones have been designated under Article 4 of the EQSD. |
| **Schema element**:mixingZoneMethodology  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs =1 minOccurs = 0  **Guidance on completion of schema element**: Conditional. Indicate whether the methodology for the designation of Mixing Zones in the RBD/Sub-unit follows the tiered approach as laid down in the ’[Technical Background Document on Identification of Mixing Zones](https://circabc.europa.eu/sd/d/78ce94bb-6f1c-4379-87ac-88a18967c4c3/Technical%20Background%20Document%20on%20the%20Identification%20of%20Mixing%20Zones.doc)’[[21]](#footnote-22).  **Quality checks**: Conditional check: Report if mixingZoneDesignation is ‘Yes’. |
| **Schema element**:alternativeMixingZoneMethodologyReference  **Field type / facets:** ReferenceType (see Annex 9)  **Properties:** maxOccurs =unbounded minOccurs = 0  **Guidance on completion of schema element**: Conditional. If the methodology for the designation of Mixing Zones in the RBD/Sub-unit does not follow the tiered approach as laid down in the ’[Technical Background Document on Identification of Mixing Zones](https://circabc.europa.eu/sd/d/78ce94bb-6f1c-4379-87ac-88a18967c4c3/Technical%20Background%20Document%20on%20the%20Identification%20of%20Mixing%20Zones.doc)’, provide references or hyperlinks to technical documents describing the alternative methodology applied. Guidance on what should be included in this document is provided in Section 7.4.3.3.  **Quality checks**: Conditional check: Report if mixingZoneMethodology is ‘No’. |
| **Schema element**:mixingZoneMeasures  **Field type / facets:** MixingZoneMeasures\_Enum:  Measures according to Article 11(3)(k) of the WFD (2000/60/EC)  Review of permits referred to in [Directive 2008/1/EC](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:024:0008:0029:EN:PDF)  Prior regulations referred to in Article 11(3)(g) of the WFD (2000/60/EC)  Other  **Properties:** maxOccurs =1 minOccurs = 0  **Guidance on completion of schema element**: Conditional. Indicate the measures taken with a view to reducing the extent of the Mixing Zones in the future.  **Quality checks**: Conditional check: Report if mixingZoneDesignation is ‘Yes’. |
| **Schema element**:mixingZoneMeasuresReductionReference  **Field type / facets:** ReferenceType (see Annex 9)  **Properties:** maxOccurs =unbounded minOccurs = 0  **Guidance on completion of schema element**: Conditional. Provide references or hyperlinks to documents describing the measures taken with a view to reducing the extent of Mixing Zones in the future. Guidance on what should be included in this document is provided in Section 7.4.3.3.  **Quality checks**: Conditional check: Report if mixingZoneDesignation is ‘Yes’. |
| **Schema element**:chemicalStatusReference  **Field type / facets:** ReferenceType (see Annex 9)  **Properties:** axOccurs =unbounded minOccurs = 1  **Guidance on completion of schema element**: Required. Provide references or hyperlinks to documents describing the methodology for the assessment of chemical status. Guidance on what should be included in this document is provided in Section 7.4.3.3. |

#### Guidance on contents of RBMPs/Background Documents

The following provides guidance on the aspects that the European Commission expects to find in the relevant chapters on methodologies in the RBMPs or in background documents. This guidance is not intended to be comprehensive in terms of what the Member States have to include in their RBMPs or background documents, rather to provide certain concrete elements of information that the European Commission expects to find.

* Information on the significant changes that have taken place, if any, since the first RBMP on the methodology or the basis of information used for the assessment of chemical status.
* Information on the approach taken in the assessment of chemical status in surface water bodies for which there is no monitoring. If status has been derived or extrapolated from monitoring data in comparable surface water bodies, explain how this has been done and in how many instances.
* Detailed information on how measurements lower than the limit of quantification are dealt with, if different from the EQSD 2009/90/EC[[22]](#footnote-23).
* Detailed information on the methodology for dealing with natural background concentrations.
* Detailed information on the methodology for dealing with pH, Dissolvable Organic Carbon or other water quality parameters that affect the bioavailability of metals.
* Detailed information on the methodology for long term trend analysis of Priority Substances;
* Detailed information on the measures to be taken to reduce the extent of Mixing Zones.
* Detailed methodology for the designation of Mixing Zones.

## Overall management objectives (nutrients, river continuity)

### Introduction

Some Member States have established management objectives to address a specific issue. Reporting on these objectives can provide useful quantitative information about objectives at RBD level.

Only Member States that have developed overall management objectives should provide this information.

### Contents of the 2016 reporting

#### Schema sketch

See Annex 10.5.

#### Information to be reported using the schema

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| **Schema: SWMET (continued)** |
| ***Class SWManagementObjectives***  ***Properties:*** *maxOccurs = 1 minOccurs = 1* |
| **Schema element**:managementObjectivesNutrients  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Indicate whether overall management objectives have been set for nutrient pollution. |
| **Schema element**:managementObjectivesNutrientsQuantitativeN  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs =1 minOccurs = 0  **Guidance on completion of schema element**: Conditional. Indicate whether quantitative objectives have been set in terms of nitrogen load reduction.  **Quality checks**: Conditional check: Report if managementObjectivesNutrients is ‘Yes’. |
| **Schema element**:managementObjectivesNutrientsQuantitativeP  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs =1 minOccurs = 0  **Guidance on completion of schema element**: Conditional. Indicate whether quantitative objectives have been set in terms of phosphorus load reduction.  **Quality checks**: Conditional check: Report if managementObjectivesNutrients is ‘Yes’. |
| **Schema element**:managementObjectivesContinuity  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Indicate whether overall management objectives have been set for river continuity. |
| **Schema element**:managementObjectivesContinuityQuantitative  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs =1 minOccurs = 0  **Guidance on completion of schema element**: Conditional. Indicate whether quantitative objectives have been set in terms of river continuity (e.g. km of rivers connected, number of obstacles to be made passable, etc).  **Quality checks**: Conditional check: Report if managementObjectivesContinuity is ‘Yes’. |
| **Schema element**:managementObjectivesReference  **Field type / facets:** ReferenceType (see Annex 9)  **Properties:** maxOccurs =unbounded minOccurs = 0  **Guidance on completion of schema element**: Conditional. Provide references to the documents and sections where further information on the management objectives can be found. Guidance on what should be included in this document is provided in Section 7.5.2.3.  **Quality checks**: Conditional check: Report if managementObjectivesContinuity or managementObjectivesNutrients is ‘Yes’. |
| **Schema element**:waterResourcePlans  **Field type / facets:** YesNoRBMPCode\_Union\_Enum: Yes, No, RBMP  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Indicate whether separate Water Resource Plans have been developed in relation to abstractions and e-flows or whether this topic is included in the RBMP. |
| **Schema element**:waterResourcePlansReference  **Field type / facets:** ReferenceType (see Annex 9)  **Properties:** maxOccurs =unbounded minOccurs = 0  **Guidance on completion of schema element**: Conditional. If there are Water Resource Plans please upload or provide the hyperlinks to the relevant documents.  **Quality checks**: Conditional check: Report if waterResourcePlans is ‘Yes’. |

#### Guidance on contents of RBMPs/Background Documents

The following provides guidance on the aspects that the European Commission expects to find in the relevant chapters in the RBMPs or in background documents if management objectives have been set. This guidance is not intended to be comprehensive in terms of what the Member States have to include in their RBMPs or background documents, rather to provide certain concrete elements of information that the European Commission expects to find.

* For nutrient load, the current nutrient load, the target nutrient load for each RBD/Sub-unit and the load reduction required for the impacted groups of surface water bodies.
* For continuity, the current status of continuity for each Sub-unit (yes, no, partial). This information should be provided for 2015, 2021, 2027 and the target date by when the Sub-unit will be connected to the river network.

Member States may also include information on other management objectives that have been set for other parameters.

## Definition of significant pressures and impacts

### Introduction

A key part of the characterisation of surface water bodies is the assessment of the risk that a surface water body may fail (in 2015) the objectives of the WFD unless appropriate measures are taken. The results of the risk assessment inform the monitoring of surface water bodies and the subsequent classification of status. It is crucial that methodologies used in risk assessment are fit for purpose in the sense of being able to identify and quantify all significant pressures within the RBD and their potential impact on status of surface water bodies (CIS Guidance Document No. 3[[23]](#footnote-24)). If not, (expensive) measures may be incorrectly targeted and objectives may (unexpectedly) not be met.

### How will the European Commission and the EEA use the information reported?

The information will be used by the European Commission to ensure that the analysis of pressures and measures has been carried out in accordance with the provisions of the WFD, and in a consistent and comparable way throughout the EU.

In addition to the compliance assessment, a series of outputs will be produced identifying the most common tools used for the assessment of pressures and impacts, in order to promote best practice.

Statistics and information will be provided to the European Parliament at EU level. Information will be provided to the public through WISE.

### Contents of the 2016 reporting

#### Schema sketch

See Annex 10.5.

#### Information and data to be reported using the Schemas

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| --- |
| **Schema: SWMET (continued)** |
| ***Class SWPressures***  ***Properties:*** *maxOccurs = 1 minOccurs = 1* |
| **Schema element**:swPressuresNotAssessed  **Field type / facets:** SignificantPressureType\_Enum (see Annex 1a)  **Properties:** maxOccurs =unbounded minOccurs = 1  **Guidance on completion of schema element**: Required. Select the pressure types from the enumeration list that have not been assessed (i.e. pressure types that have not been considered because they were not deemed to be important in the RBD, no information was available, or any other reason). If all pressures have been assessed report ‘Not applicable’. The option ‘No significant pressure’ is not valid. |
| **Schema element**: swSignificantPressurePointSourceTools  **Field type / facets:** SignificantPressureTools\_Enum:  Numerical tools  Expert judgment  Combination of both  Not assessed  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Report the tools that have been used to define significant pressures from point sources. ‘Numerical tools’ includes modelling tools. |
| **Schema element**: swSignificantPressureDiffuseSourceTools  **Field type / facets:** SignificantPressureTools\_Enum:  Numerical tools  Expert judgment  Combination of both  Not assessed  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Report the tools that have been used to define significant pressures from diffuse sources. ‘Numerical tools’ includes modelling tools. |
| **Schema element**:swSignificantPressureWaterAbstractionTools  **Field type / facets:** SignificantPressureTools\_Enum:  Numerical tools  Expert judgment  Combination of both  Not assessed  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Report the tools that have been used to define significant pressures from water abstractions. ‘Numerical tools’ includes modelling tools. |
| **Schema element**:swSignificantPressureWaterFlowTools  **Field type / facets:** SignificantPressureTools\_Enum:  Numerical tools  Expert judgment  Combination of both  Not assessed  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Report the tools that have been used to define significant pressures from water flow regulation and morphological alterations. ‘Numerical tools’ includes modelling tools. |
| **Schema element**:swSignificantPressureOtherSourceTools  **Field type / facets:** SignificantPressureTools\_Enum:  Numerical tools  Expert judgment  Combination of both  Not assessed  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Report the tools that have been used to define significant pressures from other sources. ‘Numerical tools’ includes modelling tools. |
| **Schema element**:swSignificanceDefinition  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Indicate whether significance been defined in terms of thresholds. |
| **Schema element**:swSignificanceLinkFailure  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Indicate whether the definition of significance is linked to the potential failure of objectives. |
| **Schema element**:swPressuresReference  **Field type / facets**: ReferenceType (see Annex 9):  **Properties:** maxOccurs =unbounded minOccurs = 1  **Guidance on completion of schema element**: Required. Provide references or hyperlinks to the relevant document and section where any other relevant information relating to pressure types can be found. Guidance on what should be included in this document is provided in Section 7.6.3.3. |

#### Guidance on contents of RBMPs/background documents

The following provides guidance on the aspects that the European Commission expects to find in the relevant chapters on pressures and impacts in the RBMPs or in background documents. This guidance is not intended to be comprehensive in terms of what the Member States have to include in their RBMPs or background documents, rather to provide certain concrete elements of information that the European Commission expects to find.

Report under SWPressuresReference reference(s) to the RBMP/background documents where the following information can be found:

* Include an explanation of any major change in the criteria for the identification of pressures since the first RBMP, such as adding new pressures (e.g. invasive alien species) or not reporting pressures (e.g. diffuse pollution due to mercury pollution). Also report an explanation of the changes in the methodology or the criteria (e.g. thresholds) used for the assessment of significance as regards pressures and impacts.
* Provide details on the approach to the definition of ‘significant pressure’ in particular its relationship with thresholds which may have been set, the relationship with the risk assessment (i.e. the presence of any significant pressures meaning that the surface water body is at risk), and with status (i.e. significant pressures are compatible with good status).
* Information on the tools used to define significant pressures from:
  + Point sources.
  + Diffuse sources.
  + Abstractions.
  + Water flow regulation and morphological alterations.
  + Other sources.
* Provide the reasons why certain pressures have been excluded from the pressures and impacts analysis (if appropriate).
* Details on the thresholds used for the determination of significance.
* If thresholds have not been used, how has significance been defined?

## Methodologies exemptions

### Introduction

The WFD defines its Environmental Objectives in Article 4 and sets the aim for long-term sustainable water management. Article 4(1) defines the general objective of good status (or potential for AWBs and HMWBs) to be achieved in all surface water bodies by 2015, and introduces the principle of preventing any further deterioration of status.

A number of exemptions to the general objective are possible under certain conditions. Article 4(4) allows for an extension of the deadline beyond 2015, Article 4(5) allows for the achievement of less stringent objectives, Article 4(6) allows a temporary deterioration in the status of water bodies and Article 4(7) sets out conditions in which deterioration of status or failure to achieve certain of the WFD Environmental Objectives may be permitted for new modifications to the physical characteristics of surface water bodies, and deterioration from high to good status may be possible as a result of new sustainable human development activities.

The WFD provides the general framework on exemptions but there is scope for differences in understanding and implementation. From the outset of implementation, it was clear that the use of exemptions needed to be explained further and the rules for application had to be made clearer. These clarifications can be found in the CIS Guidance Document No. 20 on exemptions[[24]](#footnote-25), which was developed over several years.

### How will the European Commission and the EEA use the information reported?

The European Commission will use the information provided to determine whether the methodology used to justify exemptions is robust and complies with the requirements of the WFD.

In addition to the compliance assessment, a series of outputs will be produced identifying the most common tools used for the assessment of pressures and impacts, in order to promote best practice.

Statistics and information will be provided to the European Parliament at EU level. Information will be provided to the public through WISE.

### Contents of 2016 Reporting

#### Schema sketch

See Annex 10.5.

#### Information and data to be reported using the schemas

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| **Schema: SWMET (continued)** |
| ***Class SWExemptions***  ***Properties:*** *maxOccurs = 1 minOccurs = 1* |
| **Schema element**:swExemption44Impact  **Field type / facets:** SignificantImpactType\_Enum (see Annex 1b)  **Properties:** maxOccurs =unbounded minOccurs = 1  **Guidance on completion of schema element**: Required. Select the impacts from the enumeration list that are causing the application of exemptions under Article 4(4). More than one impact may be selected. If Article 4(4) exemption has not been applied report ‘NOTA - Not applicable’.  The option NOSI - No significant impact ' is not valid. |
| **Schema element**:swExemption44Driver  **Field type / facets:** Driver\_Enum (see Annex 1c)  **Properties:** maxOccurs =unbounded minOccurs = 1  **Guidance on completion of schema element**: Required. Select the drivers from the enumeration list that are causing the application of exemptions under Article 4(4). More than one driver may be selected. If Article 4(4) exemption has not been applied report ‘Exemption not applied’. |
| **Schema element**:swExemption45Impact  **Field type / facets:** SignificantImpactType\_Enum (see Annex 1b)  **Properties:** maxOccurs =unbounded minOccurs = 1  **Guidance on completion of schema element**: Required. Select the impacts from the enumeration list that are causing the application of exemptions under Article 4(5). More than one impact may be selected. If Article 4(5) exemption has not been applied report ‘NOTA - Not applicable.  The option ' NOSI - No significant impact ' is not valid. |
| **Schema element**:swExemption45Driver  **Field type / facets:**  Driver\_Enum (see Annex 1c)  **Properties:** maxOccurs =unbounded minOccurs = 1  **Guidance on completion of schema element**: Required. Select the drivers from the enumeration list that are causing the application of exemptions under Article 4(5). More than one driver may be selected. If Article 4(5) exemption has not been applied report ‘Exemption not applied’. |
| **Schema element**:swDisproportionateCost  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Indicate if disproportionate costs have been used as a reason for applying exemptions under Article 4(4) or 4(5) for surface water bodies. |
| **Schema element**:swDisproportionateCostScale  **Field type / facets:** GeographicalScale\_Enum (see Annex 8l)  **Properties:** maxOccurs =unbounded minOccurs = 0  **Guidance on completion of schema element**: Conditional. Select the scale at which the calculation of costs was carried out in order to assess disproportionality from the enumeration list.  **Quality checks**: Conditional check: report if swDisproportionateCost is ‘Yes’. |
| **Schema element**:swDisproportionateCostAnalysis  **Field type / facets:** DisproportionateCostAnalysis\_Enum:  Cost-benefit analysis  Benefits assessment  Assessment of the consequences of non-action  Distribution of costs  Social and sectoral impacts  Affordability  Cost-effectiveness analysis  Other  **Properties:** maxOccurs =unbounded minOccurs = 0  **Guidance on completion of schema element**: Conditional. Select the analysis tools from the enumeration list that were used in assessing disproportionate cost. More than one analysis tool may be selected.  **Quality checks**: Conditional check: report if swDisproportionateCost is ‘Yes’ |
| **Schema element**:swDisproportionateCostAlternativeFinancing  **Field type / facets:** DisproportionateCostAlternativeFinancing\_Enum:  Distribution of costs among polluters and users  Use of public budget (national level)  Use of public budget (regional level)  Use of public budget (local level)  Private investment  EU funds  International funds  Other  **Properties:** maxOccurs =unbounded minOccurs = 0  **Guidance on completion of schema element**: Conditional. Select the alternative financing options from the enumeration list that have been considered to overcome the costs being disproportionate. More than one financing option may be selected.  **Quality checks**: Conditional check: report if swDisproportionateCost is ‘Yes’. |
| **Schema element**:swDisproportionateCostOtherEULegislation  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties:** maxOccurs =1 minOccurs = 0  **Guidance on completion of schema element**: Conditional. Indicate whether the costs of basic measures listed in Article 11(3)(a) of the WFD have been explicitly excluded from the assessment of disproportionate cost.  **Quality checks**: Conditional check: report if swDisproportionateCost is ‘Yes’ |
| **Schema element**:swTechnicalInfeasibility  **Field type / facets:** TechnicalInfeasibility\_Enum:  No technical solution is available  It takes longer to fix the problem than there is time available  There is no information on the cause of the problem so the solution cannot be identified  Other  Technical infeasibility has not been used as a reason for exemption  **Properties:** maxOccurs =unbounded minOccurs = 1  **Guidance on completion of schema element**: Required. Report how ‘technical infeasibility’ has been interpreted in the context of application of exemptions for surface water bodies.  **Quality checks**: Within-schema check: the option ‘Technical infeasibility has not been used as a reason for exemption’ is not compatible with any other. |
| **Schema element**:swNaturalConditions  **Field type / facets:** SWNaturalConditions\_Enum:  Re-establishment of flora and fauna  Natural hydrogeological conditions  Other  Natural condition has not been used as a reason for exemption for surface water bodies  **Properties:** maxOccurs =unbounded minOccurs = 1  **Guidance on completion of schema element**: Required. Report the elements considered when determining that natural conditions require an exemption under Article 4(4) or 4(5).  **Quality checks**: Within-schema check: the option ‘Natural condition has not been used as a reason for exemption for surface water bodies’ is not compatible with any other. |
| **Schema element**:swExemption46  **Field type / facets:** Exemption46\_Enum:  Yes (accidents)  Yes (extreme floods)  Yes (prolonged droughts)  Article 4(6) has not been applied  **Properties:** maxOccurs =unbounded minOccurs = 1  **Guidance on completion of schema element**: Required. Indicate whether Article 4(6) has been applied and, if so, for what reason.  **Quality checks**: Within-schema check: the option ‘Article 4(6) has not been applied’ is not compatible with any other. |
| **Schema element**:swExemption47  **Field type / facets:** Exemption47\_Enum:  Hydropower plants  Flood protection schemes  Navigation projects  Impoundment for drinking water supply  Mining project  Other  Article 4(7) has not been applied  **Properties:** maxOccurs =unbounded minOccurs = 1  **Guidance on completion of schema element**: Required. Select the modifications from the enumeration list that have led to the application of the exemption under Article 4(7). More than one modification may be selected.  **Quality checks**: Within-schema check: the option ‘Article 4(7) has not been applied’ is not compatible with any other. |
| **Schema element**:swExemptionsTransboundary  **Field type / facets:** YesNoNotApplicable\_Union\_Enum: Yes, No, Not applicable  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Indicate whether the application of exemptions has been co-ordinated in a transboundary context. Report ‘Not applicable’ if the RBD is not international. |
| **Schema element**: swExemptionsReference  **Field type / facets:** ReferenceType (see Annex 9)  **Properties:** maxOccurs =unbounded minOccurs = 1  **Guidance on completion of schema element**: Required. Provide references or hyperlinks to the relevant documents and sections where specific information on the application of exemptions in surface water bodies can be found. Guidance on what should be included in this document is provided in Section 7.7.3.3. |
| **Schema element**: driversSWExemptionsReference  **Field type / facets:** ReferenceType (see Annex 9)  **Properties:** maxOccurs =unbounded minOccurs = 1  **Guidance on completion of schema element**: Required. Provide references or hyperlinks to the relevant documents and sections where information on the drivers behind exemptions for surface water bodies can be found. Guidance on what should be included in this document is provided in Section 7.7.3.3. |

#### Guidance on contents of RBMPs/background documents

The following provides guidance on the aspects that the European Commission expects to find in the relevant chapters on exemptions in the RBMPs or in background documents. This guidance is not intended to be comprehensive in terms of what the Member States have to include in their RBMPs or background documents, rather to provide certain concrete elements of information that the European Commission expects to find.

* Analysis tools that were used in assessing disproportionate cost.
* Alternative financing options considered to overcome disproportionate cost and reasons for any options not taken further.
* Whether the costs of basic measures have been excluded from the assessment of disproportionate cost.
* The definition of technical infeasibility.
* The elements considered when determining that natural conditions require an exemption under Articles 4(4) and/or 4(5).
* If Article 4(6) is applied:
  + Description of the conditions under which circumstances that are exceptional or that could not reasonably have been foreseen may be declared, including the indicators used.
  + Description of the instances where Article 4(6) has been applied, the reasons, the levels of the indicators which make the circumstances exceptional, the surface water bodies affected and the extent of the impacts, the measures taken to restore surface water bodies affected, and the effects of such measures.
* For each application of Article 4(7), justification and explanation of the reasons for the project and the fulfilment of the conditions under Article 4(7), including:
  + Details on how the project has been assessed for deterioration of the status or failure to achieve WFD environmental objectives, based on a QE level.
  + How the assessment of cumulative effects has been considered in the application of Article 4(7).
  + The mitigation measures that are in place in relation to the application of Article 4(7).
  + The methodology for assessing over-riding public interest in the application of Article 4(7).
  + The methodology for assessing the benefits in the application of Article 4(7).
  + Details of the better environmental options that have been considered in the application of Article 4(7).
* Details of transboundary co-ordination that has taken place in the application of exemptions.

**Drivers and impacts behind exemptions**

* Include the following table in the RBMP or background document on the drivers and impacts behind exemptions to good status. The cells should contain the number of surface water bodies in which an exemption of any kind is applied relevant to each driver and impact. Surface water bodies may be exempted due to more than one combination of drivers and impacts and, therefore, the reported values when summed are not expected to equate to the total number of exempted surface water bodies. Ideally, this table should be developed for each surface water category (or at least differentiating coastal waters from the other surface water categories.

| **Impact / Driver** | Agri-culture | Climate change | Energy hydro-power | Energy non-hydro-power | Fisheries and aqua-culture | Flood protection | Forestry | Industry | Tourism and recreation | Transport | Urban development | Unknown/ Other |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| N pollution |  |  |  |  |  |  |  |  |  |  |  |  |
| P pollution |  |  |  |  |  |  |  |  |  |  |  |  |
| Organic pollution |  |  |  |  |  |  |  |  |  |  |  |  |
| Chemical pollution |  |  |  |  |  |  |  |  |  |  |  |  |
| Saline pollution |  |  |  |  |  |  |  |  |  |  |  |  |
| Acidification |  |  |  |  |  |  |  |  |  |  |  |  |
| Elevated temperatures |  |  |  |  |  |  |  |  |  |  |  |  |
| Altered habitats due to hydrological changes |  |  |  |  |  |  |  |  |  |  |  |  |
| Altered habitats due to morphological changes |  |  |  |  |  |  |  |  |  |  |  |  |
| Microbiological pollution |  |  |  |  |  |  |  |  |  |  |  |  |
| Other significant impacts |  |  |  |  |  |  |  |  |  |  |  |  |

There will be cases where data and information are not available to produce this kind of table. This may be particularly the case for certain pressures which are more difficult to quantify and/or in complex RBDs subject to many pressures, where it is difficult to disaggregate the pressure-measure relationships.

On this basis, the Member States are requested to report data and information to the best extent possible and, for the pressures, where this information is available or can be derived on the basis of reasonable efforts. In this regard, lack of reporting of this information does not imply a failure to comply with the WFD obligations.

1. https://circabc.europa.eu/sd/a/655e3e31-3b5d-4053-be19-15bd22b15ba9/Guidance%20No%202%20-%20Identification%20of%20water%20bodies.pdf [↑](#footnote-ref-2)
2. https://circabc.europa.eu/sd/a/f9b057f4-4a91-46a3-b69a-e23b4cada8ef/Guidance%20No%204%20-%20heavily%20modified%20water%20bodies%20-%20HMWB%20(WG%202.2).pdf [↑](#footnote-ref-3)
3. https://circabc.europa.eu/sd/a/85912f96-4dca-432e-84d6-a4dded785da5/Guidance%20No%205%20-%20characterisation%20of%20coastal%20waters%20-%20COAST%20(WG%202.4).pdf [↑](#footnote-ref-4)
4. https://circabc.europa.eu/sd/a/dce34c8d-6e3d-469a-a6f3-b733b829b691/Guidance%20No%2010%20-%20references%20conditions%20inland%20waters%20-%20REFCOND%20(WG%202.3).pdf [↑](#footnote-ref-5)
5. http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:332:0020:0044:EN:PDF [↑](#footnote-ref-6)
6. https://circabc.europa.eu/sd/a/61fbcb5b-eb52-44fd-810a-63735d5e4775/IC\_GUIDANCE\_FINAL\_16Dec2010.pdf [↑](#footnote-ref-7)
7. CIS Guidance Document No. 4: Identification and Designation of Heavily Modified and Artificial Water Bodies https://circabc.europa.eu/sd/a/f9b057f4-4a91-46a3-b69a-e23b4cada8ef/Guidance%20No%204%20-%20heavily%20modified%20water%20bodies%20-%20HMWB%20(WG%202.2).pdf [↑](#footnote-ref-8)
8. <https://circabc.europa.eu/sd/a/0cc3581b-5f65-4b6f-91c6-433a1e947838/TGD-EQS%20CIS-WFD%2027%20EC%202011.pdf> [↑](#footnote-ref-9)
9. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:201:0036:0038:EN:PDF> [↑](#footnote-ref-10)
10. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:201:0036:0038:EN:PDF> [↑](#footnote-ref-11)
11. On comparability between GEP and GES, see conclusions of the 2010 CIS HMWB workshop, paragraph 60A: <https://circabc.europa.eu/sd/a/cd419883-ff4d-4d43-a82b-aef3d33e04ed/Conclusions%20HMWB%20workshop%20Brussels%20March%202009.pdf> [↑](#footnote-ref-12)
12. https://circabc.europa.eu/sd/a/655e3e31-3b5d-4053-be19-15bd22b15ba9/Guidance%20No%202%20-%20Identification%20of%20water%20bodies.pdf [↑](#footnote-ref-13)
13. https://circabc.europa.eu/sd/a/f9b057f4-4a91-46a3-b69a-e23b4cada8ef/Guidance%20No%204%20-%20heavily%20modified%20water%20bodies%20-%20HMWB%20(WG%202.2).pdf [↑](#footnote-ref-14)
14. https://circabc.europa.eu/sd/a/85912f96-4dca-432e-84d6-a4dded785da5/Guidance%20No%205%20-%20characterisation%20of%20coastal%20waters%20-%20COAST%20(WG%202.4).pdf [↑](#footnote-ref-15)
15. https://circabc.europa.eu/sd/a/dce34c8d-6e3d-469a-a6f3-b733b829b691/Guidance%20No%2010%20-%20references%20conditions%20inland%20waters%20-%20REFCOND%20(WG%202.3).pdf [↑](#footnote-ref-16)
16. https://circabc.europa.eu/sd/a/06480e87-27a6-41e6-b165-0581c2b046ad/Guidance%20No%2013%20-%20Classification%20of%20Ecological%20Status%20(WG%20A).pdf [↑](#footnote-ref-17)
17. http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:348:0084:0097:en:PDF [↑](#footnote-ref-18)
18. See recital 9 of Directive 2013/39/EU and Article 3 paragraph 1a of Directive 2008/105/EC as amended by Directive 2013/39/EU. Directive 2013/39/EU adopts a less stringent AA-EQS for Naphthalene in transitional and coastal waters. In the case of Naphthalene this standard should be applied in the determination of chemical status. For all other substances the standards from Directive 2008/105/EC as in force on 13 January 2009 should be applied. [↑](#footnote-ref-19)
19. http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:201:0036:0038:EN:PDF [↑](#footnote-ref-20)
20. http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:348:0084:0097:en:PDF [↑](#footnote-ref-21)
21. https://circabc.europa.eu/sd/d/78ce94bb-6f1c-4379-87ac-88a18967c4c3/Technical%20Background%20Document%20on%20the%20Identification%20of%20Mixing%20Zones.doc [↑](#footnote-ref-22)
22. http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:201:0036:0038:EN:PDF [↑](#footnote-ref-23)
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