# Reporting at surface water body level (schema SWB)

## Overview of the structure of the 2016 reporting contents

Reporting at surface water body level 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:

* Surface water body characterisation
* Pressures and impacts on surface water bodies
* Ecological status and exemptions
* Chemical status of surface waters, exemptions and mixing zones

The following sections describe the contents of reporting. The UML diagram of the SWB schema is found in Annex 10.2.

## Characterisation of surface waters

### 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 (AWBs) and heavily modified water bodies (HMWBs). AWBs and HMWBs are required to achieve Good Ecological Potential (GEP) by 2015. Article 5 of the WFD also requires Member States to analyse the characteristics of surface water bodies (SWBs) and provide a summary report on surface water characterisation including general information on their typology.

Characterisation is a key step in the implementation of the WFD and it needs to be undertaken thoroughly and correctly in order to enable the objectives of the Directive to be efficiently and correctly achieved. Characterisation should identify all relevant categories and types of water bodies within the RBD for which specific typologies and reference conditions have to be established. This step is crucial in obtaining robust ecological status assessment and classification systems and, in particular, correctly identifying water bodies at risk of failing objectives which will subsequently become the focus for the implementation of necessary measures for the achievement of objectives.

Water bodies should be delineated at a size that allows the identification and quantification of significant pressures and the classification of status (detailed guidance is provided in [CIS Guidance Document No. 2](https://circabc.europa.eu/sd/a/655e3e31-3b5d-4053-be19-15bd22b15ba9/Guidance%20No%202%20-%20Identification%20of%20water%20bodies.pdf): Identification of Water Bodies[[1]](#footnote-2)). If water bodies are identified that do not permit an accurate description of the status of the aquatic ecosystems, the impacts of pressures may be masked and not detected. If water bodies are too small, there may be too many water bodies for a Member State to deal with in a cost-effective way. The optimum size of a water body is the size that allows the objectives of the Directive to be most efficiently achieved.

Characterisation also requires the assessment of the risk that a water body may fail the objectives of the Directive in 2015 unless appropriate measures are taken. The results of the risk assessment inform the monitoring of 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 pressures within the RBD and their potential impact on the status of water bodies (detailed guidance is provided in [CIS Guidance Document No. 3](https://circabc.europa.eu/sd/a/7e01a7e0-9ccb-4f3d-8cec-aeef1335c2f7/Guidance%20No%203%20-%20pressures%20and%20impacts%20-%20IMPRESS%20(WG%202.1).pdf): Analysis of Pressures and Impacts[[2]](#footnote-3))[[3]](#footnote-4). If not, potentially expensive measures may be incorrectly targeted and objectives may not be met.

As part of the characterisation, Member States have defined surface water body types (typology) for each surface water category (i.e. rivers, lakes, transitional waters or coastal waters) in each RBD, and have delineated surface water bodies in accordance with the methodology specified in Annex II of the WFD. This also includes the identification of HMWBs and AWBs. For each surface water body type, type-specific reference conditions have been established representing the values for that surface water body type at high ecological status.

Territorial waters are not a water body category under WFD. However, Article 2.1 of the WFD indicates that chemical status applies to territorial waters as well.

Each water category has to be divided into types based on abiotic descriptors such as altitude, geology, size, etc. using system A or system B as described in Annex II of the WFD. The ecological relevance of the different theoretical types has to be demonstrated by cross-checking them against biological data such as macroinvertebrate groups and/or species composition. This is essential to ensure that the types are relevant and fit for the purpose of allowing the robust classification of ecological status of water bodies. Not all water categories occur in every RBD and/or Sub-unit.

Member States are required to identify the ecological status of water bodies by comparing current status with near natural or reference conditions. Reference conditions have to be established for each of the surface water types. They represent the values for that surface water body type at high ecological status.

According to Annex II of the WFD, reference conditions can be established using different methods (without specific ranking):

* Spatially based reference conditions using data from monitoring sites if sufficient undisturbed or minimally disturbed sites are available.
* When adequate numbers of representative reference sites are not available in a region/type, predictive modelling, using the data available within a region/type or borrowing data from other similar regions/types, can be used in model construction and calibration.
* A combination of the above approaches.
* Where it is not possible to use these methods, reference conditions can be established using expert judgement.

Establishing reference conditions for many quality elements may involve using more than one of the methods described above.

The WFD protects all waters independently of their size, but for operational purposes it defines a water body as a ‘discrete and significant’ element of water. The water body is the scale at which status is assessed. The thresholds given in Annex II for system A typology have been used as a possibility for differentiating water bodies but this approach should not exclude smaller water bodies from the protection of the Directive. Member States have flexibility to decide not to designate very small water bodies where, due to the large number of water bodies in a RBD, this would result in a high administrative burden. Instead, Member States can aggregate these small water bodies into groups or include them as part of a larger contiguous water body of the same surface water category and of the same type.

Article 6 of the WFD requires Member States to establish a register or registers of all areas lying within each RBD which have been designated as requiring special protection under specific Community legislation for the protection of their surface water and groundwater, or for the conservation of habitats and species directly depending on water. These are known as Protected Areas. Member States should identify and map the protected areas in their RBMPs (Annex VII WFD).

The WFD requires that objectives for protected areas established under Community legislation should also be met.

Article 7 of the WFD requires Member States to establish drinking water protected areas for bodies of groundwater and surface water providing more than 10 m3 a day as an average or serving more than 50 persons, or for bodies that are intended for that use in the future. The objective for these areas is to avoid deterioration in quality in order to reduce the level of purification treatment required.

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

The European Commission will use this information to assess whether and how Member States have implemented the key obligations of the WFD.

With regard to the typology of surface water bodies, the key issues in assessing compliance with the Directive will be identifying whether typology is meaningful for the purpose of establishing a classification system for ecological status, whether the level of typology is comparable (in particular in international RBDs) and whether type-specific reference conditions have been adequately defined.

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

For information relating to the typology of surface waters in accordance with the WFD, more detailed guidance and information is provided in the REFCOND (CIS Guidance Document No. 10: River and Lakes - Typology, Reference Conditions and Classification Systems[[4]](#footnote-5)), COAST (CIS Guidance Document No. 5: Transitional and Coastal Waters - Typology, Reference Conditions and Classification Systems[[5]](#footnote-6)) and water bodies (CIS Guidance Document No. 2: Identification of Water Bodies[[6]](#footnote-7)).

#### Products from reporting

The following products will be produced by the European Commission or the EEA from the data and information reported by Member States.

| **Nb** | **Name of product** | **Type of product** | **Scale of information\*** | **Detailed information displayed** | **Source of detailed information and aggregation rule** | **Used in 2012 reports?** |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | **Number and average size of surface water bodies** | Table | EU/MS/ RBD/  SU | Number and size (length/area) of surface water bodies by Category.  Total length or total area of surface water bodies by Category.  Average size of surface water bodies by Category. | Average: sum of length (rivers) or area (rest) of all surface water bodies divided by the number of surface water bodies.  Aggregation on the basis of the information reported at water body level. | Yes |
| 2 | **Spatial reference layer of surface water bodies** | Spatial dataset | WB | Mapping of all surface water bodies. | Spatial dataset including all surface water bodies. | Yes |
| 3 | **Number of types of surface water bodies** | Table | MS | Number of types of surface water bodies reported by Category. | Count of different types on the basis of the information provided at surface water body level. | Yes |
| 4 | **Percentage of HMWBs and AWBs** | Map | RBD/SU | Percentage of HMWBs and AWBs by Category. | Aggregation on the basis of the information reported at water body level. | Yes |
| 5 | **Percentage of natural, HMWBs and AWBs** | Chart | MS | Percentage of HMWBs and AWBs by Category. | Aggregation on the basis of the information reported at water body level. | Yes |
| 6 | **Natural, heavily modified and artificial water bodies** | Table | MS/ RBD/  SU | Number and size (length/area) of natural water bodies, AWBs and HMWBs by Category. | Aggregation on the basis of the information reported at water body level. | Yes |

**Notes:** \* Scale of information: EU = European; MS = National, Member State; RBD = River Basin District; SU = Sub-unit; WB = water body

### Contents of 2016 reporting

### Schema sketch

See Annex 10.2.

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

Information regarding the delineation and characterisation of surface water bodies should be reported at surface water body level according to the schema SWB.

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| **Schema: SWB** |
| ***Class: SurfaceWaterBody***  ***Properties:*** *maxOccur: unbounded minOccur: 1* |
| **Schema element**:euSurfaceWaterBodyCode  **Field type / facets / relationship**:FeatureUniqueEUCodeType  **Properties:** maxOccurs = 1 minOccurs = 1  **Guidance on completion of schema element**: Required. Unique EU code of the surface water body. Prefix the surface water body’s national, unique code with the Member State’s 2-alpha character ISO country code[[7]](#footnote-8).  **Quality checks**: Element check: EUSurfaceWaterBodyCode must be reported. String length must be within the range of 3 to 42 characters. First 2 characters must be the Member State’s 2-alpha character ISO country code. Only one value can be reported.  Within-schema check: euSurfaceWaterBodyCode must be unique. |
| **Schema element**:euSubUnitCode  **Field type / facets / relationship**: FeatureUniqueEUCodeType  **Properties:** maxOccurs = 1 minOccurs = 0  **Guidance on completion of schema element**: Conditional. If the RBD has been divided into Sub-units, report the unique EU code of the Sub-unit where the water body is located. Prefix the Sub-unit’s national, unique code with the Member State’s 2-alpha character ISO country code24.  **Quality checks**: Conditional check: report if *RBDSUCA/RBD/*subUnitsDefined is ‘Yes’.  Element check:String length must be a maximum of 42 characters. First 2 characters must be the Member State’s 2-alpha character ISO country code. Only one value can be reported.  Cross-schema check: The reported EUSubUnitCode must be consistent with the codes reported in *RBDSUCA*/*RBD*/*SubUnit*/euSubUnitCode. |
| **Schema element**:surfaceWaterBodyName  **Field type / facets / relationship**: String250Type  **Properties**: maxOccurs = 1 minOccurs = 1  **Guidance on completion of schema element**:Required.Readily understandable name of the surface water body in English that is meaningful outside of the RBD or Member State. It should include the name of the river, lake, transitional water, coastal water or territorial water in which the surface water body is located. |
| **Schema element**: surfaceWaterBodyCategory  **Field type / facets / relationship**: SWCategoryCode\_Enum: RW, LW, TW, CW, TeW  **Properties**: maxOccurs = 1 minOccurs = 1  **Guidance on completion of schema element**:Required.Category of surface water body must be reported.  ‘RW’ = River water body.  ‘LW’ = Lake water body.  ‘TW’ = Transitional water body.  ‘CW’ = Coastal water body.  ‘TeW’ = Territorial water body.  Territorial waters are not a water body category under WFD. However, Article 2.1 of the WFD indicates that chemical status applies as well to territorial waters. This option allows Member States to report the relevant information for the part of territorial waters which extend beyond coastal waters. Non-relevant information such as water body type or ecological status does not need to be reported for territorial waters (see the guidance provided for these schema elements).  It is the recommendation of this Guidance that reservoirs formed by damming rivers (i.e. heavily modified rivers) should be reported as river water bodies.See schema element reservoir below. |
| **Schema element**:naturalAWBHMWB  **Field type / facets / relationship**: NaturalCode\_Enum:  Natural  Artificial  Heavily Modified  **Properties**: maxOccur: 1 minOccur: 1  **Guidance on completion of schema element**:Required.Indicate whether the surface water body is natural or artificial or heavily modified.  Note: a water body cannot be both artificial and heavily modified.  A reservoir may be artificial (e.g. constructed for bankside storage) or heavily modified (e.g. a dammed or impounded river).  A canal may be artificial (e.g. specifically constructed for navigation where there was no surface water body before) or heavily modified (e.g. a river that has been deepened or widened or similarly engineered for navigation).  The identification of the category for artificial water bodies (AWBs) or heavily modified water bodies (HMWBs) as described in the Category element does not preclude any decision regarding the factors to use in deriving typology and the quality elements to use in the assessment of the AWBs or HMWBs. According to the WFD Annex II, 1.1.v, the typology differentiation should be undertaken in accordance with the descriptors for whichever natural surface water category most closely resembles the AWB or HMWB concerned. Similarly, the quality elements should be those applicable to whichever natural surface water category most closely resembles the AWB or HMWB (WFD Annex V, 1.1.5). This means that reservoirs made by damming rivers may be categorised as heavily modified rivers but should be typified and assessed using the elements and tools for lakes, as lakes is the natural surface water category which reservoirs most closely resemble.  The option "Natural" should be chosen for territorial waters.  **Quality checks**: The option 'Natural' must be chosen if surfaceWaterBodyCategory is 'TeW'. |
| **Schema element**: hmwbWaterUse  **Field type / facets / relationship**: HMWBWaterUse\_Enum:  Agriculture - land drainage,  Agriculture - irrigation,  Energy - hydropower,  Energy - non-hydropower,  Storage for fisheries/aquaculture/fish farms,  Flood protection,  Industry supply,  Tourism and recreation,  Transport - navigation / ports,  Urban development - drinking water supply,  Urban development - other use,  Wider environment - nature protection and other ecological uses,  Other,  Unknown,  **Properties**: maxOccurs = unbounded minOccurs = 0  **Guidance on completion of schema element**:Conditional. For HMWBs only, report the water use for which it has been designated.  ‘Wider environment’ can refer to designation in order to maintain nature protected areas and also archaeological sites and patrimony (see CIS Guidance Document No. 4 – Identification and Designation of Heavily Modified and Artificial Water Bodies[[8]](#footnote-9)).  **Quality checks**: Conditional check: Report if naturalAWBHMWB is ‘Heavily Modified’. |
| **Schema element**:hmwbPhysicalAlteration  **Field type / facets / relationship**: HMWBPhysicalAlteration\_Enum:  Locks  Weirs / dam / reservoir  Channelisation / straightening / bed stabilisation / bank reinforcement  Dredging / channel maintenance  Land reclamation / coastal modifications / ports  Land drainage  Other  **Properties**: maxOccurs = unbounded mixOccurs: 0  **Guidance on completion of schema element**:Conditional. For HMWBs only, report the physical alteration that has resulted in the designation of the surface water body as a HMWB. In the context of designation, physical alterations mean any significant alterations that have resulted in substantial changes to the hydromorphology of a surface water body such that the surface water body is substantially changed in character. In general, these hydromorphological characteristics are long-term and alter both the morphological and hydrological characteristics. Further guidance on the terms is found in the Glossary section below.  **Quality checks**:Conditional check:Report if naturalAWBHMWB is ‘Heavily Modified’. |
| **Schema element**:reservoir  **Field type / facets / relationship**: YesNoUnclearReservoir\_Enum:  Yes, it is a reservoir and the water body was originally a river  No, it is a reservoir but the water body was originally a lake  Unclear, it is a reservoir but originally included chained rivers and lakes  The water body is not a reservoir  **Properties**: maxOccurs = 1 mixOccurs: 0  **Guidance on completion of schema element**: Conditional. For heavily modified river or lake water bodies, indicate whether the water body is a reservoir that has been created by damming a river (‘Yes, it is a reservoir and the water body was originally a river’) or an existing lake (‘No, it is a reservoir but the water body was originally a lake’).  It is the recommendation of this Guidance that reservoirs formed by damming rivers should be reported as heavily modified river water bodies.However, Member States may choose to report reservoirs formed by damming rivers as lake water bodies if they wish. The ‘reservoir’ schema element must be reported so that Member States can clarify the designation.  ‘Yes, it is a reservoir and the water body was originally a river’ = Select only if the whole surface water body represents a reservoir (or part of a reservoir) created by damming a river. (surfaceWaterBodyCategory must be reported as ‘RW’ and naturalAWBHMWB as ‘Heavily Modified’).  ‘No, it is a reservoir but the water body was originally a lake’ = Select if the whole surface water body represents a reservoir (or part of a reservoir) created by modifying an existing lake, or if the surface water body includes some small reservoirs which are not significant enough to be identified as separate surface water bodies. (surfaceWaterBodyCategory must be reported as ‘LW’ and naturalAWBHMWB as ‘Heavily Modified’).  ‘Unclear, it is a reservoir but originally included chained rivers and lakes’ = Select in such cases where the reservoir has been created by damming a water body which contained chained rivers and lakes. (surfaceWaterBodyCategory must be reported as ‘RW’ or ‘LW’ and naturalAWBHMWB as ‘Heavily Modified’).  ‘The water body is not a reservoir’ = Indicates that the river or lake water body is not a reservoir.  **Quality checks**: Conditional check: Report if surfaceWaterBodyCategory is ‘RW’ or ‘LW’ AND naturalHeavilyModified is ‘Heavily Modified’. |
| **Schema element**:surfaceWaterBodyTypeCode  **Field type / facets / relationship**: String100Type  **Properties**: maxOccurs = 1 minOccurs = 1  **Guidance on completion of schema element**: Required. Member State code for the characterisation type of the surface water body, as reported in the surface water methodology schema (SWMET), and the RBMP and background documents.  Report 'Not applicable' for territorial waters.  **Quality checks**:  Within-schema check: 'Not applicable' should be reported only if surfaceWaterBodyCategory is 'TeW'.  Cross-schema check: The reported surfaceWaterBodyTypeCode must be consistent with the codes reported in *SWMET*/*SWType*/swTypeCode. |
| **Schema element**:surfaceWaterBodyIntercalibrationType  **Field type / facets / relationship**: 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’.  Report 'Not applicable' for territorial waters.  **Quality checks**: Within-schema check: 'Not applicable' should be reported if SurfaceWaterBodyCategory is 'TeW'.  Cross-schema check: SurfaceWaterBodyIntercalibrationType must be consistent with the codes reported in *SWMET/*IntercalibrationType |
| **Schema element**:surfaceWaterBodyTransboundary  **Field type / facets / relationship**: YesNoNotApplicable\_Union\_Enum: Yes, No, Not applicable  **Properties**: maxOccurs = 1 minOccurs = 1  **Guidance on completion of schema element**: Required.  The Directive requires coordination among Member States for the management of transboundary Water Bodies. Transboundary water bodies are those crossing the border between countries or constituting part of the border between two countries for a certain length.  For reporting purposes in the case of water bodies that cross the border between countries, and for the sake of clarity, each Member State should report on its own part of these trans-boundary Water Bodies. Geographic information should therefore be provided for the part of the Water Body within the reporting Member State and likewise for all elements which have a clear geographical reference (e.g. size, monitoring stations). Each Member State should also report on all elements that apply to the whole water body (status, pressures, etc). For the latter the Commission expects that the information provided by each of the Member States concerned will be identical, as a result of the coordinated management required by the Directive.  Similarly, for water bodies which constitute part of the border between two countries the same principles apply. In the case of rivers represented as lines, the same line will have to be reported by both Member States concerned, instead of reporting different but adjacent areas, as is the case, for example, for a lake that extends across the border.  Not applicable for territorial waters.  **Quality checks**: Within-schema check: ' Not applicable ' should be reported if SurfaceWaterBodyCategory is 'TeW'. |
| **Schema element**: swAssociatedProtectedArea  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties**: maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Indicate whether the surface water body is associated to any protected area. |

#### GIS information:

GIS information should be reported in GML file format (see Annex 5 for further information) for **all river water bodies**, not just the main rivers as was the case in 2010.

For further information and specifications on the reporting of GIS data, including the reporting of shared water bodies, please refer to Annex 5 (GIS guidance).

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

See SWMET schema for information requested on methodologies for characterisation.

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

Some Member States which have a large number of surface water bodies with low pressures **group surface water bodies** for the assessment of pressures and status. The information reported for the surface water bodies belonging to a group will therefore be identical.

Further clarification as regards the terms used in relation to physical alterations for HMWB (element hmwbPhysicalAlteration above):

* Locks: device for raising and lowering boats between stretches of water of different levels on river and canal waterways.
* Weirs / dam / reservoir: transversal barrier constructed across a river or a lake discharge for the purpose of creating a water impoundment.
* Channelisation / straightening / bed stabilisation: any permanent modification which longitudinally affects river banks and/or river bed, including changing direction, reducing meandering, stabilisation of river banks, etc.
* Dredging / Channel maintenance: modifications due to regular maintenance of rivers through dredging for any given purpose, usually navigation or flood protection
* Land reclamation / coastal modifications / ports: modification of a water body as a result of the creation of new land from ocean, riverbeds, or lake (e.g. for the purpose of expanding or creating a port).
* Land drainage: modification of a water body as a result of the artificial change to the water level intended to make available existing land for a particular purpose (often for agricultural production or for urbanisation).

## Pressures and impacts on surface waters

### Introduction

In the case of surface waters, the WFD requires the identification of **significant pressures** from point sources of pollution, diffuse sources of pollution, modifications of flow regimes through abstractions or regulation and morphological alterations, as well as any other pressures. ‘Significant’ is interpreted as meaning that the pressure contributes to an **impact** that may result in the failing of Article 4(1) Environmental Objectives (see ’glossary’ below for further explanations).

The identification of significant pressures and their resulting impacts (which in turn lead to a reduced status) can involve different approaches: field surveys, inventories, numerical tools (e.g. modelling), expert judgement or a combination of tools. The magnitude of the pressure is usually compared with a threshold or criteria, relevant to the water body category and type, to assess its significance.

Reporting of pressures has to be seen in the context of the WFD planning process. The purpose of the Article 5 pressures and impacts analysis is to identify the water bodies which are at risk of failing to meet the Environmental Objectives of the WFD, either because they will not achieve good status or because their status is at risk of deterioration. Member States may have very comprehensive pressure inventories, but the purpose of reporting is focused on the ‘significance’ in relation to the WFD Environmental Objectives. Therefore, a pressure or impact should only be reported if it is significant, alone or in combination with others, because it puts the Environmental Objectives at risk. For example, the mere existence of point sources of pollution in a water body is not a reason to report point sources as a significant pressure. It should only be reported if these point sources put the achievement of the Environmental Objectives in the water body at risk. Significant pressures should only be reported for those water bodies which have been identified as being at risk.

The Article 5 pressures and impacts analysis is a crucial initial step in the planning process. The resulting risk assessment should then be used to design the monitoring programmes. One of the purposes of the monitoring programmes is to validate the risk assessment (see WFD Annex V section 1.3.1). This validation is then expected to feed into the risk assessment of the next planning cycle to refine the definition of ‘significance’ and improve the results. Indeed, in the first RBMPs, for the first risk assessment, Member States may have used certain pressure thresholds or criteria to define ‘significance’, but given the scarce impact data available at the time (the monitoring programmes had not yet started) it was not possible to establish a clear link to the impacts in terms of Environmental Objectives. For the second RBMPs, given the significant progress in terms of availability of information on pressures, impacts, responses, monitoring data and status, the pressures and impacts analysis and the risk assessment should have improved considerably, making this important first step of the planning process much more reliable.

This does not mean that the information on pressures and status at water body level should match one to one in all cases. It is expected that some water bodies may have been identified as being ‘at risk’ but their status is ’good’, either because the significant pressures identified are not large enough to cause the water body to be in less than good status in the given local conditions, or because the risk identified is a risk of deterioration. The opposite case (less than good status with no significant pressure) is seldom expected to happen, as the pressures analysis should be driven by a precautionary approach and be thorough enough to capture all potential pressures causing risk.

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

The purpose of the collection of the information is to identify the main pressures within the RBD. The summary information will be used to compile maps at a European level of relevant pressures and to ensure that relevant pressures have been identified at RBD level. 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

Note: for all relevant products, information on surface water bodies will be presented by number of surface water bodies and by size (length or area) as well as percentage.

| **Nb** | **Name of product** | **Type of product** | **Scale of information\*** | **Detailed information displayed** | **Source of detailed information and aggregation rule** | **Used in 2012 reports?\*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | **Percentage of surface water bodies of each Category affected by significant pressures of each type** | Map | RBD/SU | Percentage of surface water bodies by Category subject to significant pressures of each type (point, diffuse, hydromorphological, etc). | Aggregation on the basis of the information on pressures provided at water body level | Yes |
| 2 | **Aggregation tables: Significant pressures affecting surface water bodies by number, size and category** | Table | MS/ RBD/  SU | Number and size (length/area) of surface water bodies affected by significant pressures, by Category. | Aggregation on the basis of the information reported at water body level | Yes |
| 3 | **Aggregation tables: Significant pressures affecting surface water bodies by number and percentage** | Table | MS/ RBD/  SU | Number and percentage of surface water bodies affected by significant pressures. | Aggregation on the basis of the information reported at water body level | Yes |
| 4 | **Proportion of total number of classified surface water bodies with identified significant pressures, by Category** | Chart | EU | Percentage of classified surface water bodies affected by significant pressures, by Category. | Aggregation on the basis of the information reported at water body level – water bodies with unknown status not included. | Yes |
| 5 | **Proportion of river water bodies affected by diffuse and hydromorphological pressures in different Member States** | Chart | MS | Proportion of river water bodies affected by diffuse and hydromorphological pressures. | Aggregation on the basis of the information reported at water body level – water bodies with unknown status not included. | Yes |
| 6 | **Proportion of lake water bodies affected by diffuse and hydromorphological pressures in different Member States** | Chart | MS | Proportion of lake water bodies affected by diffuse and hydromorphological pressures. | Aggregation on the basis of the information reported at water body level – water bodies with unknown status not included. | Yes |
| 7 | **Proportion of transitional, coastal and territorial water bodies affected by diffuse and hydromorphological pressures in different Member States** | Chart | MS | Proportion of transitional, coastal and territorial water bodies affected by diffuse and hydromorphological pressures. | Aggregation on the basis of the information reported at water body level – water bodies with unknown status not included. | Yes |
| 8 | **Pollution / hydromorphological pressures of**  **classified river water bodies, according to population density and percentage of**  **arable land in the river basin** | Chart | EU | River basins grouped according to population density and percentage of arable land (five groups each). Pollution and hydromorphological pressures of all river water bodies in the groups aggregated. Proportion of river water bodies affected by the two pressures are presented. | Aggregation on the basis of the information reported at water body level supplemented with information on population and land use in the RBDs – water bodies with unknown status not included. | Yes |
| 9 | **Pollution / hydromorphological pressures of**  **classified river water bodies, according to population density and percentage of**  **arable land** | Chart | EU | Water bodies have been grouped according to population density and percentage of arable land (five groups each). Pollution and hydromorphological pressures of all river water bodies in the groups aggregated. Proportion of river water bodies affected by the two pressures are presented. | Aggregation on the basis of the information reported at water body level supplemented with information on population and land use per water body. | It was not possible to produce (no information on population and land use was available at water body level). |
| 10 | **Aggregation tables: Impacts affecting surface water bodies** | Table | MS/ RBD/  SU | Number and size (length/area) of surface water bodies affected by impacts, by Category. | Aggregation on the basis of the information reported at water body level. | Yes |
| 11 | **Proportion of total number of classified surface water bodies with identified impacts, for (a) rivers, (b) lakes, (c) coastal waters, (d) transitional waters, and (e) territorial waters** | Chart | EU | Percentage of surface water bodies affected by significant impacts, by Category. | Aggregation on the basis of the information reported at water body level – water bodies with unknown status not included. | Yes |
| 12 | **Drivers responsible for failure of good status** | Table | RBD/SU | Number of water bodies failing good status due to each driver.  Percentage of water bodies failing good status due to each driver in relation to total number of water bodies failing good status (total and by Category). | Aggregation on the basis of the information on pressures provided at water body level. | It was not possible to produce (drivers were not reported unless linked to pressures reported at detailed level, which was optional). |

**Notes:** \* Scale of information: EU = European; MS = National, Member State; RBD = River Basin District; SU = Sub-unit; WB = water body

### Contents of 2016 reporting

#### Schema sketch

See Annex 10.2.

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

Information regarding the pressures and impacts on surface water bodies should be reported at surface water body level according to the schema SWB.

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| **Schema: SWB (continued)** |
| ***Class: SurfaceWaterBody (continued)***  ***Properties:*** *maxOccur: unbounded minOccur: 1* |
| **Schema element**:swSignificantPressureType  **Field type / facets**: SignificantPressureType\_Enum (see Annex 1a)  **Properties**: maxOccurs =unbounded minOccurs = 1  **Guidance on completion of schema element**: Required. Indicate the significant pressure type(s) from the enumeration list.  If a combination of pressure-driver is not significant on its own but it is in combination with others, select all the relevant pressures of that type that are present which make the overall pressure significant (e.g. if abstraction from industry or agriculture is not relevant on their own but they are relevant in combination, select both).  If the ecological status or potential of the surface water body is less than good, at least one significant pressure type must be reported. The option ‘No significant pressure’ is not valid.  If the chemical status of the surface water body is less than good, at least one significant pressure type must be reported. The option ‘No significant pressure’ is not valid.  **Quality checks**: Within-schema check: the option ‘No significant pressure’ is not compatible with any other.  Within-schema check: the option 'Not applicable' is not compatible with any other option and can be selected if and only if surfaceWaterBodyCategory is 'TeW' (not compatible with any other surfaceWaterBodyCategory).  Within-schema check: If SWB/SurfaceWaterBody/swEcologicalStatusOrPotentialValue is ‘3’, ‘4’ or ‘5’, at least one significant pressure type must be selected from the enumeration list (can include option ‘8 Unknown pressures’). The option ‘No significant pressure’ is not a valid selection.  Within-schema check: If SWB/SurfaceWaterBody/swChemicalStatusValue is ‘3’, at least one significant pressure type must be selected from the enumeration list (can include ‘8 Unknown pressures’). The option ‘No significant pressure’ is not a valid selection. |
| **Schema element**:swSignificantPressureOther  **Field type / facets**: String1000Type  **Properties:** maxOccurs =1 minOccurs = 0  **Guidance on completion of schema element**: Conditional. If ’7 – Anthropogenic pressure – Other’ is selected from the enumeration list and reported under swSignificantPressureType, provide details of any other anthropogenic pressure types which are relevant in this element. This element should only be reported if the pressure type is not included in the enumeration list under swSignificantPressureType.  **Quality checks**: Conditional check: Report if ‘7 – Anthropogenic pressure - Other’ is selected from the enumeration list under swSignificantPressureType. |
| **Schema element**:swSignificantImpactType  **Field type / facets:** SignificantImpactType\_Enum (see Annex 1b)  **Properties**: maxOccurs =unbounded minOccurs = 1  **Guidance on completion of schema element**: Required. Indicate the impact type(s) from the enumeration list.  If the ecological status or potential of the surface water body is less than good, at least one significant impact type or the option ‘UNKN - Unknown impact type’ must be reported. The option ‘NOSI - No significant impact’ is not valid.  If the chemical status of the surface water body is less than good, at least one significant impact type or the option ‘UNKN - Unknown impact type’ must be reported. The option ‘NOSI - No significant impact’ is not valid.  **Quality checks**: Within-schema check: the option ‘NOSI - No significant impact’ is not compatible with any other.  Within-schema check: the option ’ NOTA - Not applicable’ is not compatible with any other option and must be selected if and only if surfaceWaterBodyCategory is 'TeW' (not compatible with any other surfaceWaterBodyCategory).  Within-schema check: If SWB/SWEcologicalStatus/SwEcologicalStatusOrPotentialValue is ‘3’, ‘4’ or ‘5’, at least one significant impact type or the option ‘UNKN - Unknown impact type’ must be selected from the enumeration list . The option ‘NOSI - No significant impact’ is not a valid selection. Within-schema check: If SWB/SurfaceWaterBody/swChemicalStatusValue is ‘3’, at least one significant impact type or the option ‘UNKN - Unknown impact type’ must be selected from the enumeration list. The option ‘NOSI - No significant impact’ is not a valid selection. |
| **Schema element**:swSignificantImpactOther  **Field type / facets:** String1000Type  **Properties:** maxOccurs =1 minOccurs = 0  **Guidance on completion of schema element**: Conditional. If ’ OTHE - Other significant impact type’ is selected from the enumeration list under swSignificantImpactType, provide details of any other impact types which are relevant in this element. This element should only be reported if the impact type is not included in the enumeration list under swSignificantImpactType.  **Quality checks**: Conditional check: Report if ’ OTHE - Other significant impact type’ is selected from the enumeration list under swSignificantImpactType |

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

See SWMET schema for information requested on methodologies for pressure and impact analysis.

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

Some Member States which have large number of water bodies with low pressures may **group water bodies** for the assessment of pressures and status. The information reported for the water bodies belonging to a group will therefore be identical.

’Significant Pressures’ are those pressures which, either alone, or in combination with other pressures prevent or put at risk the achievement of WFD Article 4(1) Environmental Objectives including the achievement of good status, the non-deterioration of status, the avoidance of a significant and sustained upward trend in pollution of groundwater, and the achievement of objectives in WFD protected areas. This means that for the second RBMPs, all water bodies which are below good status and are not expected to achieve good status in 2015 are at risk and Member States are expected to identify significant pressures for them.

Pressures may combine to cause water bodies to be failing, or to be at risk of failing, WFD Environmental Objectives. For example, a point source discharge may not present a risk on its own, but when combined with a reduction in flow will have an impact on a water body. In that case, both pressures (point source and abstraction) should be identified as significant. The same happens when there are different pressures of the same type but caused by different drivers. For example abstraction for drinking water supply and for industry in a particular water body may not be significant on their own, but if they are when combined, they should be identified as significant.

## Ecological status and 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 WFD’s general objective to be achieved in all surface and groundwater bodies, i.e. good status (for natural water bodies) or potential (for Artificial or Heavily Modified Water Bodies) by 2015, and introduces the principle of preventing any further deterioration of status. A number of exemptions to the general objectives 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.
* 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: Exemptions to the Environmental Objectives[[9]](#footnote-10) published in 2009.

Annex V of the WFD specifies how Member States are to monitor and present overall ‘status’ classification for each of their water bodies in all water categories, as well as the status for each of the Biological Quality Elements (BQEs) / Quality Elements (QEs) used.

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

Information on the status of water bodies is the basic indicator which informs whether the implementation of the WFD is successful. The majority of the data and information reported by Member States will be used for visualisation in maps, graphs and charts and for providing information to the public through WISE. Furthermore, the data and maps will provide a comparison of current status with the baseline status reported in the first RBMPs (e.g. answering the question, has the ecological status improved since the Programme of Measures required by the WFD was implemented?). This means that the requested data and maps will be essential for trend analyses, for policy development and for the assessment of policy effectiveness.

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

Note: for all relevant products, information on surface water bodies will be presented by number of surface water bodies and by size (length or area) as well as percentage.

| **Nb** | **Name of product** | **Type of product** | **Scale of information\*** | **Detailed information displayed** | **Source of detailed information and aggregation rule** | **Used in 2012 reports?\*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | **Number and percentage of surface water bodies of high or good status and expected improvement** | Table | WB | Number and percentage of surface water bodies of high or good ecological status or potential and expected improvement.  Number and percentage of surface water bodies of good chemical status and expected improvement. | Aggregation on the basis of the information provided at water body level, | Yes |
| 2 | **Surface water bodies of good ecological status and use of exemptions** | Chart | MS | Percentage of surface water bodies currently of good or better ecological status or potential.  Percentage of surface water bodies of unknown status.  Percentage of surface water bodies in which exemptions are applied. | Aggregation on the basis of the information reported at water body level. | Yes |
| 3 | **Percentage of surface water bodies of less than good ecological status** | Map | RBD | Proportion of classified surface water bodies of less than  good ecological status or potential, by Category. | Aggregation on the basis of the information reported at water body level. | Yes |
| 4 | **Percentage of surface water bodies of unknown status** | Table | MS/RBD | Proportion of classified surface water bodies of unknown status. |  | No |
| 5 | **River Basin Specific Pollutants (RBSPs) monitored and RBSPs causing failure of good ecological status, with EQS** | Table | MS | RBSPs monitored and RBSPs causing failure of good ecological status, with EQS. | Aggregation of information reported at RBD level. | It was not possible to produce (necessary information was not included in reporting requirements) |
| 6 | **Percentage of failure of good ecological status attributable to RBSPs** | Chart | MS | Percentage of failure of good ecological status attributable to RBSPs. | Aggregation of information reported at water body level. | It was not possible to produce (necessary information was not included in reporting requirements) |
| 7 | **Aggregation tables: Ecological status of surface water bodies** | Table | MS/ RBD/SU | Number and size (length/area) of surface water bodies by ecological status or potential class, by Category. | Aggregation on the basis of the information reported at water body level. | Yes |
| 8 | **Distribution of ecological status or potential of classified rivers, lakes, transitional and coastal** | Chart | EU | Percentage of surface water bodies by ecological status or potential class, by Category. | Aggregation on the basis of the information reported at water body level – water bodies with unknown status not included. | Yes |
| 9 | **Ecological status or potential of classified river water bodies** | Chart | MS | Percentage of river water bodies by ecological status or potential class. | Aggregation on the basis of the information reported at water body level – water bodies with unknown status not included. | Yes |
| 10 | **Ecological status or potential of classified lake water bodies** | Chart | MS | Percentage of lake water bodies by ecological status or potential class. | Aggregation on the basis of the information reported at water body level – water bodies with unknown status not included. | Yes |
| 11 | **Ecological status or potential of classified transitional and coastal water bodies** | Chart | MS | Percentage of transitional and coastal water bodies by ecological status or potential class. | Aggregation on the basis of the information reported at water body level – water bodies with unknown status not included. | Yes |
| 12 | **Ecological status/potential of classified river water bodies, according to population density and percentage of arable land in the river basin** | Chart | EU | River basins grouped according to population density and percentage of arable land (five groups each). Ecological status or potential of all river water bodies in the groups aggregated. Proportion presented by class. | Aggregation on the basis of the information reported at water body level supplemented with information on population and land use in the RBDs – water bodies with unknown status not included. | Yes |
| 13 | **Ecological status/potential of classified river water bodies, according to population density and percentage of arable land** | Chart | EU | Water bodies grouped according to population density and percentage of arable land (five groups each). Ecological status or potential of all river water bodies in the groups aggregated. Proportion presented by class | Aggregation on the basis of the information reported at water body level supplemented with information on population and land use per water body. | It was not possible to produce (no information on population and land use was available at water body level). |
| 14 | **Aggregation tables: Ecological and chemical status of surface water bodies** | Table | MS/ RBD/  SU | Number and size (length/area) of chemical status of surface water bodies, by Category. | Aggregation on the basis of the information reported at water body level. | Yes |
| 15 | **Ecological status/potential of classified surface water bodies, according to broad water types** | Chart | EU/MS/RBD | Surface water bodies grouped according to broad water types. Ecological status or potential of all river water bodies in the groups aggregated. Proportion presented by class. | Aggregation on the basis of the information reported at water body level supplemented with information on population and land use per water body. | It was not possible to produce (too many national types and no detailed information on typology available) |
| 16 | **Trend in median (a) total ammonium, (b) total phosphorus and (c) nitrate concentrations of river water bodies, grouped by ecological status/potential class** | Chart | EU | WFD water body data linked with WISE-SoE long time series data on water quality in rivers ((a) total ammonium, (b) total phosphorus and (c) nitrate concentrations). Trend in water quality presented for each class extrapolated to 2027 to illustrate whether water bodies in moderate to poor ecological status or potential are approaching high to good ecological status or potential. | Aggregation on the basis of the information reported at water body level combined with information on river water quality from the WISE-SoE database. | Yes |
| 17 | **Progress in achieving good status since the first RBMP** | Map/ Chart | MS/ RBD/SU | Percentage of water bodies which have achieved good ecological status or potential since the first RBMP. | Aggregation on the basis of the information reported at water body level. | Not relevant in 2010 reporting |
| 18 | **Progress towards achievement of good status since the first RBMP by quality element** | Map/ Chart | MS/ RBD/  SU | Percentage of surface water bodies which have improved ecological status or potential since the first RBMP by quality element. | Aggregation on the basis of the information reported at water body level. | Not relevant in 2010 reporting |
| 19 | **Reasons behind WFD Article 4(4) exemptions** | Chart | MS | Exemptions reported by Member States to extend the deadline of the achievement of good status beyond 2015 and reasons given (natural condition, technical feasibility, disproportionate costs or combinations). | Aggregation on the basis of the information reported at water body level. | Yes |
| 20 | **Percentage of surface water bodies of good ecological status in 2015** | Map/ Chart/ Table | EU/MS/RBD/SU | Percentage of surface water bodies of good ecological status or potential in 2015, aggregated for all surface waters, by Category. | Aggregation on the basis of the information reported at water body level. | No |

**Notes:** \* Scale of information: EU = European; MS = National, Member State; RBD = River Basin District; SU = Sub-unit; WB = water body

### Contents of the 2016 reporting

#### Schema sketch

See Annex 10.2.

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

**General guidance for QEs:**

Reporting of the status assessment of Quality Elements (QEs) is expected not only where monitoring results are available for specific water bodies but also for all water bodies for which this information is available (e.g. through grouping or extrapolation). A status value should, therefore, be given for each of the relevant QEs that have been assessed for the water body and subsequently used to classify the ecological status or potential of the water body.

If the status of QEs is not reported then it is assumed that it is not used in the classification of the ecological status of the water body.

Information regarding the ecological status of surface water bodies should be reported at surface water body level according to the schema SWB.

|  |
| --- |
| **Schema: SWB (continued)** |
| ***Class: SurfaceWaterBody (continued)***  ***Properties:*** *maxOccur: unbounded minOccur: 1* |
| **Schema element**:swEcologicalStatusOrPotentialValue  **Field type / facets:** EcologicalStatusCode\_Enum: 1, 2, 3, 4, 5, Unknown, Not applicable  **Properties**: maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Indicate the ecological status or potential of the surface water body, based on the most recently assessed status of the surface water body.  ‘1’ = High status or maximum potential.  ‘2’ = Good status or potential.  ‘3’ = Moderate status or potential.  ‘4’ = Poor status or potential.  ‘5’ = Bad status or potential.  ‘Unknown’ = Unknown status or potential.  ‘Not applicable’ = Not applicable (for territorial waters only).  **Quality checks**: Within-schema check: if surfaceWaterBodyCategory is 'TeW' then 'Not applicable' must be selected. |
| **Schema element**:swEcologicalAssessmentYear  **Field type / facets:** YearRangeType  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Provide the year on which the assessment of status or potential is based. This may be the year that the surface water body was monitored. In case of grouping this may be the year in which monitoring took place in the surface water bodies within a group that are used to extrapolate results to non-monitored surface water bodies within the same group. A period is possible (e.g. 2011--2013).  **Quality checks**: Within-schema check: if surfaceWaterBodyCategory is 'TeW' then '0000' must be reported. |
| **Schema element**: swEcologicalAssessmentConfidence  **Field type / facets:** Confidence\_Enum: 0, 1, 2, 3  **Properties**: maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Indicate the confidence on the ecological status or potential assigned,  ‘0’ = No information.  ‘1’ = Low confidence.  ‘2’ = Medium confidence.  ‘3’ = High confidence.  The criteria used by Member States to assess confidence vary considerably, but general guidance may be: Low = no monitoring data; Medium = supporting QE data and/or limited data on one BQE; High = good data for at least one BQE and the most relevant supporting QE.  In case surfaceWaterBodyCategory is 'TeW', '0' should be selected and interpreted as 'Not applicable'. |
| **Schema element**:swEcologicalStatusOrPotentialExpectedGoodIn2015  **Field type / facets:** YesNoNotApplicable\_Union\_Enum: Yes, No, Not applicable  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Indicate whether it is expected that this surface water body will achieve good (or better) ecological status or potential by the end of 2015.  This may differ from the data reported under swEcologicalStatusOrPotentialValue because the assessment of status included in the second RBMP will most likely be based on monitoring data from the period 2010-2014, given that the second RBMP will be prepared in 2014 for public consultation. Therefore, the status communicated in the second RBMP may not necessarily reflect the expected status in 2015. The methodology of this assessment should be clearly explained in the RBMP or background documents (reference reported under classification methodologies (see Section 7.3)).  If an Article 4(4) or 4(5) exemption for ecological status is applied then 'No' should be selected.  'Not applicable' is only valid in case SurfaceWaterCategory is 'TeW'.  **Quality checks**: Within-schema check: If swEcologicalExemptionType is 'Article 4(4)…' or ‘Article 4(5)…’ , the option ‘No’ must be selected from the enumeration list. All other options are not valid selections.  Within-schema check: if surfaceWaterBodyCategory is 'TeW' then 'Not applicable' must be selected. |
| **Schema element**:swEcologicalStatusOrPotentialExpectedAchievementDate  **Field type / facets:** GoodStatus\_Enum:  2016--2021  2022--2027  Beyond 2027  Unknown  Less stringent objectives already achieved  **Properties**: maxOccurs =1 minOccurs = 0  **Guidance on completion of schema element**: Conditional. If good ecological status or potential will NOT be achieved by 2015 (swEcologicalStatusOrPotentialExpectedGoodIn2015 is No), report the date by which it is expected that it will be achieved in full. The methodology of this assessment should be clearly explained in the RBMP or background documents (reference reported under classification methodologies). If good ecological status or potential will not be achieved by 2015, exemptions should be applied. Please report the date by which it is expected that good ecological status or potential will be achieved in full, not the date relating to individual exemptions. However, please note the following:  Article 4(4) exemptions relate to the extension of deadlines. According to Article 4(4)c of the WFD, postponing the achievement of objectives beyond 2027 is only possible due to natural conditions.  If Article 4(5) exemptions apply, report the date by when the less stringent objective is to be achieved. If the less stringent objective has already been achieved then select 'Less stringent objectives already achieved'. If good ecological status or potential will be achived by 2015 (swEcologicalStatusOrPotentialExpectedGoodIn2015 is Yes) this element should not be reported.  This element should not be reported if surfaceWaterBodyCategory is 'TeW' (territorial waters).  **Quality checks**: Conditional check: Report if swEcologicalStatusOrPotentialExpectedGoodIn2015 is ‘No’. Within-schema check: 'Less stringent objectives already achieved' is only a valid entry if 'Article 4(5)…' is reported under swEcologicalExemptionType. |

The following class (child of SurfaceWaterBody) is used to report RBSPs for which the status or potential is less than good:

|  |
| --- |
| **Schema: SWB (continued)** |
| ***Class: FailingRBSP***  ***Properties:*** *maxOccur: unbounded minOccur: 0* |
| **Schema element**:swFailingRBSP  **Field type / facets:** RBSP\_Enum (see Annex 8b)  **Properties**: maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required[[10]](#footnote-11). If the status or potential of QE 3-3 River Basin Specific Pollutants is less than good (as reported in class QualityElement, see below), select the code and name of the RBSP.  The RBSPs selected from the enumeration list must be included in the methodology schema (SWMET/SWRBSP/rbsp) where details of all RBSPs’ good-moderate EQS are reported, i.e. the RBSPs reported in this element are those that are failing their associated good-moderate EQS in this surface water body.  **Quality checks**: Conditional check: Report if, in Class 'QualityElement', qeStatusOrPotentialValue='3' when qeCode='QE3-3 - River Basin Specific Pollutants'.  Cross-schema check: The selected RBSPs must be consistent with the values reported in SWMET/SWRBSP/rbsp |
| **Schema element**:swFailingRBSPOther  **Field type / facets:** String100Type  **Properties**: maxOccurs = 1 minOccurs = 0  **Guidance on completion of schema element**: Conditional. Report CAS number and name of the RBSP failing if not on the enumeration list under swFailingRBSP.  **Quality checks**: Conditional check: report at least 1 if ‘EEA\_00-00-0 - Other chemical parameter' is chosen under 'swFailingRBSP'. |

The following class (child of SurfaceWaterBody) is used to report exemptions at water body level at global ecological status level:

|  |
| --- |
| **Schema: SWB (continued)** |
| ***Class: SWEcologicalExemptionType***  ***Properties****; max Occur: unbounded minOccur: 1* |
| **Schema element**:swEcologicalExemptionType  **Field type / facets / relationship**: ExemptionType\_Enum (see Annex 8g)  **Properties:** maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Report which type(s) of exemption(s) apply if good ecological status or potential is not expected to be achieved by 2015. More than one exemption may apply to a surface water body.  In case surfaceWaterCategory is 'TeW', 'No exemption' should be reported and interpreted as 'Not applicable'.  **Quality checks**: Within-schema check: 'No exemption' is not compatible with any other option.  Within-schema check: If swEcologicalStatusOrPotentialExpectedGoodIn2015 is 'No' then the option 'No exemption' is not possible. One or more of the other options must be selected.  Within-schema check: if surfaceWaterCategory is 'TeW' then 'No exemption' must be selected. |
| **Schema element**: swEcologicalExemptionPressure  **Field type / facets / relationship**: SignificantPressureType\_Enum (see Annex 1a)  **Properties**: maxOccurs =unbounded minOccurs = 0  **Guidance on completion of schema element**: Conditional. If any Article 4(4), Article 4(5) and/or Article 4(7) exemptions apply to this surface water body for ecological status, report the significant pressure(s) that are causing failure in order to justify the exemption(s).  **Quality checks**:  Conditional check: If swEcologicalExemptionType is not ‘No exemption’, at least one significant pressure type must be selected from the enumeration list (the options ‘No significant pressure’ and ‘Not applicable’ are not valid). |

**Reporting of information for each Quality Element**

The following class (child of SurfaceWaterBody) is used to report status and exemptions of the 19 individual quality elements. For each quality element, the following information should be reported. The information should be reported for all surface water categories (rivers, lakes, transitional and coastal waters).

|  |
| --- |
| **Schema: SWB (continued)** |
| ***Class: QualityElement***  ***Properties****: maxOccurs = 19 minOccurs = 19* |
| **Schema element**:qeCode  **Field type / facets:** StatusQE\_Enum (see Annex 8h)  **Properties:** maxOccurs = 1 minOccurs = 1  **Guidance on completion of schema element**: Required. Select in turn each of the quality elements once and provide the associated information.  **Quality checks**: Information for all quality elements should be provided. Each quality element should be chosen only once |
| **Schema element**:qeStatusOrPotentialValue  **Field type / facets:** QEStatusCode\_Enum: 1, 2, 3, 4, 5, MonitoredButNotUsed, Unknown, Not applicable  **Properties:** maxOccurs = 1 minOccurs = 1  **Guidance on completion of schema element**: Required. Indicate the results of the assessment of this QE for all relevant surface water categories.  ‘1’ = High status or maximum potential.  ‘2’ = Good status or potential.  ‘3’ = Moderate status or potential (for QE1) or less than good status or potential (for QE2 and QE3).  ‘4’ = Poor status or potential (this option is only valid for quality elements starting with QE1).  ‘5’ = Bad status or potential (this option is only valid for quality elements starting with QE1).  ‘MonitoredButNotUsed’ = Monitored but no standard has been developed and/or the QE is not used for status assessment (this option is only valid for quality elements starting with QE2 or QE3).  ‘Unknown’ = Unknown status or potential.  ‘Not applicable’ = Not applicable  If there is no monitoring information for this QE and/or status is unknown then select ' Unknown' from the enumeration list. If the QE is not applicable in the surface water category or type then select option ‘Not applicable’ from the enumeration list.  **Quality checks**:  Within-schema check: if surfaceWaterCategory is 'TeW' then 'Not applicable' must be selected.  If qeCode is any quality element starting with QE1, the option ‘MonitoredButNotUsed’ is not valid. If qeCode is any quality element starting with QE2 or QE3, the options ‘4’ and ‘5’ are not valid. |
| **Schema element**:qeMonitoringResults  **Field type / facets:** MonitoringResults\_Enum: Monitoring, Grouping, Expert judgement  **Properties:** maxOccurs = 1 minOccurs = 0  **Guidance on completion of schema element**: Conditional. If the status is reported, indicate on what basis the status classification was derived:  'Monitoring': means the QE was monitored in this surface water body and the results are used as a basis for classification.  ‘Grouping’: the QE was not monitored in this surface water body. Monitoring from other similar water bodies was used as a basis for classification, as described in the methodology for classification.  'Expert judgement': the QE was not monitored in this surface water body. Results from other similar water bodies were not used. The QE status is mainly based on expert judgement.  **Quality checks**: Conditional check: Report if element qeStatusOrPotentialValue is ‘1’, ‘2’, ‘3’, ‘4’ or ‘5’ (i.e. not ‘MonitoredButNotUsed’, ‘Unknown’, ‘Not applicable’). |
| **Schema element**:qeMonitoringPeriod  **Field type / facets:** YearRangeType  **Properties:** maxOccurs = 1 minOccurs = 0  **Guidance on completion of schema element**: Conditional. If the QE was monitored and the classification was derived from the monitoring data available, indicate the year/period of the monitoring data which was used in the classification.  **Quality checks**: Conditional check: Report if qeMonitoringResults is ‘Monitoring’. |
| **Schema element**:qeGrouping  **Field type / facets:** FeatureUniqueEUCodeType  **Properties:** maxOccurs = unbounded minOccurs = 0  **Guidance on completion of schema element**: Conditional. If no monitoring data is available for this surface water body and status has been derived through grouping by extrapolating monitoring data from other surface water bodies, indicate the codes of the surface water bodies which have been monitored and used in grouping.  For example, if the status of surface water body A has been determined by extrapolating monitoring data from surface water bodies B and C, then the euSurfaceWaterBodyCode for surface water bodies B and C should be reported in this element.  **Quality checks**:  Conditional check: Report if qeMonitoringResults is ‘Grouping’.  Within-schema check: euSurfaceWaterBodyCode reported in qeGrouping must be consistent with codes reported in SWB/SWCharacterisation/euSurfaceWaterBodyCode. |
| **Schema element**:qeStatusOrPotentialChange  **Field type / facets:** ValueQEX\_StatusOrPotentialChange\_Enum: +2, +1, 0, -1, -2, Unknown2010, No information  **Properties:** maxOccurs = 1 minOccurs = 1  **Guidance on completion of schema element**: Required. If the information is available and if there has been a change in classification since the first RBMP was reported, report that change. Otherwise, report ‘No\_information’. This covers all cases in which it is not possible to identify a change between 2010 and 2016, for example, new Water Bodies, for which there is no correspondence in the 2010 reporting or new reporting (as is the case for Norway):  ’+2’ = Improvement by 2 or more classifications.  ’+1’ = Improvement by 1 classification.  ’0’ = No change of classification (select as the default).  ‘-1’ = Deterioration by 1 classification.  ‘-2’ = Deterioration by 2 or more classifications.  ’Unknown2010’ = Status or potential was unknown in 2010.  ‘No information’ = No information available and/or impossible to compare current status or potential with status or potential in 2010. |
| **Schema element**:qeStatusOrPotentialComparability  **Field type / facets:** SoPComparability\_Enum:  Consistent change  Inconsistent due to changes to monitoring  Inconsistent due to changes to assessment methods  Inconsistent due to changes to monitoring and assessment methods  No information or unknown  **Properties:** maxOccurs = 1 minOccurs = 0  **Guidance on completion of schema element**: Conditional. If there has been a change in classification since the first RBMP was reported, indicate whether the reported change in status or potential is considered as being/due to:  ‘Consistent change’ = A real change of status due to measures or due to increased/decreased pressures.  ‘Inconsistent due to changes to monitoring’ = A significant change in monitoring (site, methodology) since the first RBMPs.  ‘Inconsistent due to changes to assessment methods’ = A significant change in the assessment method since the first RBMPs.  ‘Inconsistent due to changes to monitoring and assessment methods’ = A significant change in monitoring (site, methodology) and the assessment method since the first RBMPs.  The default value to select should be ‘Consistent change’.  **Quality checks**  Conditional check: Report if qeStatusOrPotentialChange is ’+2’, ‘+1’, ‘-1’ or ‘-2’. |
| **Schema element**:qeEcologicalExemptionType  **Field type / facets:** ExemptionType\_Enum (see Annex 8g)  **Properties:** maxOccurs = unbounded minOccurs = 1  **Guidance on completion of schema element**: Required. Report which type(s) of exemption(s) apply to this surface water body and QE. More than one exemption may apply.  If surfaceWaterCategory is 'TeW' then 'No exemption' must be selected, which should be interpreted as 'Not applicable'.  **Quality check**:  Within-schema check: the option 'No exemption' is not compatible with any other.  If surfaceWaterCategory is 'TeW' then 'No exemption' must be selected. |

## Chemical status of surface waters, exemptions and Mixing Zones

### Introduction

‘Good surface water chemical status’ means the chemical status required to meet the Environmental Objectives for surface waters established in Article 4(1)(a) of the WFD, that is the chemical status achieved by a body of surface water in which concentrations of pollutants do not exceed the environmental quality standards (EQS) established in Annex IX and under Article 16(7), and under other relevant Community legislation setting EQS at Community level. It should be noted that under Article 2(1) of the WFD, territorial waters are included for the assessment and reporting of chemical status.

Decision 2455/2001/EC[[11]](#footnote-12) of the European Parliament and of the Council of 20 November 2001 established the list of Priority Substances in the field of water policy. The Decision identified the substances for which EQS were to be set at Community level which was implemented by means of Directive 2008/105/EC[[12]](#footnote-13) (the EQS Directive (EQSD)). Eight other pollutants that were regulated by Directive 76/464/EEC[[13]](#footnote-14) were also incorporated into the assessment of chemical status.

The EQSD includes a number of other obligations relating to Priority Substances, in particular the trend monitoring of certain Priority Substances in sediment or biota (Article 3(3) EQSD) and the establishment of an inventory of emissions, discharges and losses (Article 5 EQSD, see also Section 9.2).

Directive 2009/90/EC[[14]](#footnote-15) (the QA/QC Directive) on the quality and comparability of chemical monitoring specifies minimum performance criteria to ensure the quality of the analytical results. The deadline for transposition of the QA/QC Directive into national legislation was 21 August 2009, just before the adoption of the first RBMPs.

Directive 2013/39/EU[[15]](#footnote-16), amending the WFD and EQSD as regards Priority Substances, was adopted on 12 August 2013. The revised EQSs for existing Priority Substances should be taken into account for the first time in RBMPs covering the period 2015 to 2021. The newly identified Priority Substances and their EQSs should be taken into account in the establishment of supplementary monitoring programmes and in preliminary Programmes of Measures to be reported by Member States by the end of 2018.

With the aim of achieving good surface water chemical status, the revised EQSs for existing Priority Substances should be met by the end of 2021 and the EQSs for newly identified Priority Substances by the end of 2027. This is without prejudice to Article 4(4) to (9) of the WFD, which includes inter alia provisions for extending the deadline for achieving good surface water chemical status or achieving less stringent Environmental Objectives for specific bodies of water on the grounds of disproportionate cost and/or socio-economic need, provided that no further deterioration occurs in the status of the affected bodies of water.

The determination of surface water chemical status by the 2015 deadline laid down in Article 4 of the WFD should be based, therefore, only on the substances and EQSs set out in the EQSD in the version in force on 13 January 2009 unless those EQSs are stricter than the revised EQS under Directive 2013/39/EU, in which case the revised (less strict) EQSs should be applied[[16]](#footnote-17).

However, Directive 2013/39/EU requires Member States to achieve good chemical status by 2021 for those existing substances for which a more stringent standard has been adopted. This would require that an assessment is included in the second RBMPs to be adopted in 2015 on the basis of the new EQSs and, if necessary, measures should be included in the Programmes of Measures to be operational by 2018 at the latest.

Directive 2013/39/EU allows that, with regard to the presentation of chemical status for the purposes of the update of the Programmes of Measures and the RBMPs to be carried out in accordance with Article 11(8) and Article 13(7) of the WFD, respectively, Member States should be allowed to present separately the impact on chemical status of newly identified Priority Substances and of existing Priority Substances with revised EQSs. This is so that the introduction of new requirements is not mistakenly perceived as an indication that the chemical status of surface waters has deteriorated. In addition to the obligatory map covering all substances, additional maps could be separately provided covering newly identified substances, existing substances with revised EQSs, substances behaving like ubiquitous PBTs, and all other substances.

The EQSD also contains a provision regarding the possibility of designating Mixing Zones (Article 4 EQSD). This is linked with the so-called ‘combined approach’ (Article 10 WFD). Effluent discharge control regimes are normally designed to ensure that concentrations of Priority Substances or other pollutants in the receiving water do not exceed the EQS. However, if their concentration in the effluent is greater than the EQS value at the point of discharge there will be a zone of EQS exceedance in the vicinity of the point of discharge. Article 4 of the EQSD allows Member States to permit such zones of exceedance in water bodies when a number of criteria are met:

* Mixing Zones may be designated adjacent to points of discharge within which concentrations of one or more substances listed in Part A of Annex 1 of the EQSD may exceed the relevant EQS provided that they do not affect the compliance of the rest of the surface water body with those EQS.
* The Mixing Zones should be restricted to the proximity of the discharge and be proportionate.
* Certain information (such as on the approaches and methodologies applied to define such Mixing Zones; and on the measures taken with a view to reducing the extent of the Mixing Zones in the future) should be provided in the RBMPs (see also Section 7.4).

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

The information reported by Member States will be used to establish the key indicator on the percentage of water bodies of good chemical status in the River Basin District or Sub-unit. In addition, the majority of the reported information will be used for visualisation purposes and for providing information to the public through WISE. Furthermore, the data and maps will provide a comparison of current status with the baseline status reported in the first RBMP enabling the question ‘how has the water quality improved since the Programme of Measures required by the WFD was implemented?’ to be answered. This means that the requested data and maps will be essential for trend analyses, for policy development and for the assessment of policy effectiveness.

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

The European Commission also needs to identify whether Mixing Zones have been designated and the approaches used (see Section 7.3).

#### Products from reporting

Note: for all relevant products, information on surface water bodies will be presented by number of surface water bodies and by size (length or area) as well as percentage.

| **Nb** | **Name of product** | **Type of product** | **Scale of information\*** | **Detailed information displayed** | **Source of detailed information and aggregation rule** | **Used in 2012 reports?** |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | **Priority Substances causing failure of good chemical status in surface water bodies** | Table | MS | Number of surface water bodies in which each Priority Substance causes failure of good chemical status. | Aggregation of information reported at water body level. | It was not possible to produce (reporting of individual Priority Substances was optional). |
| 2 | **Percentage of surface water bodies failing good chemical status** | Map/  Chart | MS | Percentage of surface water bodies failing good chemical status by Category. | Aggregation of information reported at water body level | It was not possible to produce a complete picture because of large percentages of water bodies in unknown status. |
| 3 | **Percentage of rivers, lakes, groundwater, transitional and coastal waters of good, poor and unknown chemical status** | Chart | EU | Percentage of surface water bodies by chemical status class, by Category. | Aggregation on the basis of the information reported at water body level. | Yes |
| 4 | **Chemical status of rivers and lakes** | Chart | MS | Percentage of river and lake water bodies of poor and good chemical status. | Aggregation on the basis of the information reported at water body level – water bodies with unknown status not included. | Yes |
| 5 | **Chemical status of rivers and lakes** | Map | RBD | Percentage of river and lake water bodies failing to achieve good chemical status. | Aggregation on the basis of the information reported at water body level – water bodies with unknown status not included. | Yes |
| 6 | **Chemical status of transitional and coastal water bodies** | Chart | MS | Percentage of transitional and coastal water bodies in poor and good chemical status. | Aggregation on the basis of the information reported at water body level – water bodies with unknown status not included. | Yes |
| 7 | **Chemical status of transitional, coastal and territorial water bodies** | Map | RBD | Percentage of transitional, coastal and territorial water bodies failing to achieve good chemical status. | Aggregation on the basis of the information reported at water body level – water bodies with unknown status not included. | Yes |
| 8 | **Aggregation tables: Ecological and chemical status of surface water bodies** | Table | MS/ RBD/SU | Number and size (length/area) of chemical status of surface water bodies by Category. | Aggregation on the basis of the information reported at water body level. | Yes |
| 9 | **Progress in achieving good status since the first RBMPs.** | Map/ Chart/  Table | MS/ RBD/SU | Percentage of surface water bodies which have achieved good chemical status since the first RBMPs. | Aggregation on the basis of the information reported at water body level. | Not relevant in 2010 reporting |
| 10 | **Progress towards achievement of good status since the first RBMPs by quality element** | Map/ Chart/  Table | MS/ RBD/SU | Percentage of surface water bodies which have improved chemical status since the first RBMPs by quality element. | Aggregation on the basis of the information reported at water body level. | Not relevant in 2010 reporting |
| 11 | **Reasons behind Article 4(4) exemptions** | Chart/  Table | MS | Exemptions reported by Member States to extend the deadline of the achievement of good status beyond 2015 and reasons given (natural condition, technical feasibility, disproportionate costs or combinations). | Aggregation on the basis of the information reported at water body level. | Yes |
| 12 | **Percentage of surface water bodies of good chemical status in 2015 based on 2008 EQS for PS in 2008 EQSD** | Map/  Chart/  Table | EU/MS/ RBD/  SU | Percentage of surface water bodies of good chemical status in 2015, based on 2008 EQS for PS, aggregated for all surface water bodies, by Category. | Aggregation on the basis of the information reported at water body level. | No |
| 13 | **Percentage of surface water bodies of good chemical status in 2015 based on 2013 EQS for PS in 2008 EQSD** | Map/Chart/Table | EU/MS/RBD/  SU | Percentage of surface water bodies of good chemical status in 2015, based on 2013 EQS for PS, aggregated for all surface water bodies, by Category. | Aggregation on the basis of the information reported at water body level. | No |
| 14 | **Percentage of surface water bodies in good chemical status in 2015 based on 2013 EQS for PS excluding uPBTs in 2008 EQSD** | Map/  Chart/  Table | EU/MS/RBD/  SU | Percentage of surface water bodies of good chemical status in 2015, based on 2013 EQS for PS excluding uPBTs in 2008, aggregated for all surface water bodies, by Category. | Aggregation on the basis of the information reported at water body level. | No |
| 15 | **Percentage of surface water bodies in good chemical status in 2015 based on 2013 EQS for PS including uPBTs in 2008 EQSD** | Map/Chart/Table | EU/MS/RBD/  SU | Percentage of surface water bodies of good chemical status in 2015, based on 2013 EQS for PS including uPBTs in 2008, aggregated for all surface water bodies, by Category. | Aggregation on the basis of the information reported at water body level. | No |
| 16 | **Differentiated presentation of assessments based on 2008 and 2013 standards** | Map/  Chart | EU/MS/RBD/  SU | Comparison of the percentage of surface water bodies of good chemical status based on 2008 and 2013 EQS for PS. | Aggregation on the basis of the information reported at water body level. | No |
| 17 | **Designation of mixing zones and exceedances** | Chart/  Table | EU/MS/RBD/  SU | Number of Mixing Zones designated.  Percentage of Mixing Zones in relation to the whole length/area of surface water bodies (where information available).  Substances showing or predicted to show exceedances in the Mixing Zones. | Aggregation of information reported at water body level. | It was not possible to produce (necessary information was not included in reporting requirements) |

**Notes:** \* Scale of information: EU = European; MS = National, Member State; RBD = River Basin District; SU = Sub-unit; WB = water body

### Contents of the 2016 reporting

#### Schema sketch

See Annex 10.2.

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

Information regarding the chemical status of surface water bodies should be reported at surface water body level according to the schema SWB.

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| **Schema: SWB (continued)** |
| ***Class: SurfaceWaterBody (continued)***  ***Properties:*** *maxOccur: unbounded minOccur: 1* |
| **Schema element**:swChemicalStatusValue  **Field type / facets:** StatusCode\_Enum: 2, 3, U  **Properties**: maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**:  Required. Indicate the chemical status of the water body.  ‘2’ = Good status.  ‘3’ = Poor status.  ‘U’ = Unknown status.  With the exception of the AA-EQS for naphthalene in transitional waters, coastal waters and territorial waters, this should be based on the standards laid down in EQS Directive 2008/105/EC (version in force on 13 January 2009). |
| **Schema element**:swChemicalAssessmentYear  **Field type / facets:** YearRangeType  **Properties**: maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**:  Required. Provide the year on which the assessment of status is based. This may be the year that the surface water body was monitored. In case of grouping this may be the year in which monitoring took place in the surface water bodies within a group that are used to extrapolate results to non-monitored surface water bodies within the same group. A period is possible (e.g. 2011--2013). |
| **Schema element**:swChemicalAssessmentConfidence  **Field type / facets:** Confidence\_Enum: 0, 1, 2, 3  **Properties**: maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Indicate the confidence on the chemical status assigned.  ‘0’ = No information.  ‘1’ = Low confidence.  ‘2’ = Medium confidence.  ‘3’ = High confidence.  The criteria used by Member States to assess confidence vary considerably, but general guidance may be: Low = no monitoring data; Medium = limited or insufficiently robust monitoring data for some or all Priority Substances that are discharged in the RBD; High = good data for all Priority Substances that are discharged in the RBD. |
| **Schema element**:swChemicalMonitoringResults  **Field type / facets:** MonitoringResults\_Enum: Monitoring, Grouping, Expert judgement  **Properties**: maxOccurs =1 minOccurs = 0  **Guidance on completion of schema element**: Conditional. Indicate on what basis the status classification was derived:  'Monitoring': there is monitoring data available from this water body and this is used for classfication.  ‘Grouping’: there is no monitoring data available from this water body. Monitoring from other similar water bodies was used as a basis for classification, as described in the methodology for classification.  'Expert judgement': there is no monitoring data available in this surface water body. Results from other similar water bodies were not used. The status is mainly based on expert judgement.  **Quality checks**: Quality checks: Conditional check: Report if element swChemicalStatusValue is ‘2’ or ‘3’ (i.e. not 'U'). |
| **Schema element**:swChemicalStatusGrouping  **Field type / facets:** FeatureUniqueEUCodeType  **Properties**: maxOccurs =unbounded minOccurs = 0  **Guidance on completion of schema element**: Conditional. If no monitoring data is available for this surface water body and status has been derived through grouping by extrapolating monitoring data from other surface water bodies, indicate the codes of the surface water bodies which have been monitored and used in grouping.  For example if the status of surface water body A has been determined by extrapolating monitoring data from surface water bodies B and C, then the euSurfaceWaterBodyCode for surface water bodies B and C should be reported in this element.  **Quality checks**: Conditional check: Report if swChemicalMonitoringResults is ‘Grouping’.  Within-schema check: euSurfaceWaterBodyCode reported in swChemicalStatusGrouping must be consistent with codes reported in SWB/SurfaceWaterBody/euSurfaceWaterBodyCode. |
| **Schema element**:swChemicalStatusExpectedGoodIn2015  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties**: maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Indicate whether it is expected that this surface water body will achieve good chemical status by the end of 2015.  This may differ from the data reported under swChemicalStatusValue because the assessment of status included in the second RBMP will most likely be based on monitoring data from the period 2010-2014, given that the second RBMP will be prepared in 2014 for public consultation. Therefore, the status communicated in the second RBMP may not necessarily reflect the expected status in 2015. The methodology of this assessment should be clearly explained in the RBMP or background documents (reference reported under classification methodologies (see Section 7.4)).  If an Article 4(4) or 4(5) exemption for chemical status is applied then 'No' should be selected.  **Quality checks**: Within-schema check: If swChemicalExemptionType for any of the substances reported as exceeding is 'Article 4(4)…' or ‘Article 4(5)…’, the option ‘No’ must be selected from the enumeration list. |
| **Schema element**: swChemicalStatusExpectedAchievementDate  **Field type / facets:** GoodStatus\_Enum:  2016--2021  2022--2027  Beyond 2027  Unknown  Less stringent objectives already achieved  **Properties**: maxOccurs =1 minOccurs = 0  **Guidance on completion of schema element**: Conditional. If good chemical status will NOT be achieved by 2015 (swChemicalStatusExpectedGoodIn2015 is No), report the date by which it is expected that it will be achieved in full. The methodology of this assessment should be clearly explained in the RBMP or background documents (reference reported under classification methodologies).  If good chemical status will not be achieved by 2015, exemptions should be applied. Please report the date by which it is expected that good chemical status will be achieved in full, not the date relating to individual exemptions. However, please note the following:  Article 4(4) exemptions relate to the extension of deadlines. According to Article 4(4)c of the WFD, postponing the achievement of objectives beyond two further updates of the river basin management plan is only possible due to natural conditions.  If Article 4(5) exemptions apply, report the date by when the less stringent objective is to be achieved. If the less stringent objective has already been achieved then select 'Less stringent objectives already achieved'.  If good chemical status will be achieved by 2015 (swChemicalStatusExpectedGoodIn2015 is Yes) this element should not be reported.  **Quality checks**: Quality checks: Conditional check: Report if swChemicalStatusExpectedGoodIn2015 is ‘No’.  Within-schema check: 'Less stringent objectives already achieved' is only a valid entry if 'Article 4(5)…' is reported under swChemicalExemptionType. |
| **Schema element**:swMixingZones  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties**: maxOccurs =1 minOccurs = 0  **Guidance on completion of schema element**: Optional. Report whether Mixing Zones have been designated in the surface water body. |
| **Schema element**:swMixingZonesProportion  **Field type / facets:** NumberPercentageType  **Properties**: maxOccurs =1 minOccurs = 0  **Guidance on completion of schema element**: Optional. Report the percentage of length or area of the surface water body that has been designated as a Mixing Zone. |

The following class (child of SurfaceWaterBody) is used to report information about priority substances at water body level. Report all priority substances for which one or more of the following circumstances occur in the relevant water body:

* The substance is causing failure of chemical status due to exceedance of the relevant EQS (element swPrioritySubstanceCausingFailure and swPrioritySubstanceExceedanceType)
* The priority substance has improved from poor to good chemical status since the first RBMP (element swPrioritySubstanceImprovingChemicalStatus)
* The more stringent EQSs adopted in Directive 2013/39/EU caused the status of the surface water body to appear to deteriorate (element swPrioritySubstanceEffectStatusNewThresholds)
* The priority substance exceeds or is expected to exceed the EQS within the mixing zone (optional element swPrioritySubstanceExceedanceInMixingZone)

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| **Schema: SWB (continued)** |
| ***Class: SWPrioritySubstance***  ***Properties****; max Occur: unbounded minOccur: 0* |
| **Schema element**: swPrioritySubstanceCode  **Field type / facets / relationship**: PS\_Enum (see Annex 8d)  **Properties**: maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required[[17]](#footnote-18). Select each priority substance for which one or more of the following circumstances occur in the relevant water body:  - The substance is causing failure of chemical status due to exceedance of the relevant EQS (element swPrioritySubstanceCausingFailure and swPrioritySubstanceExceedanceType)  - The priority substance has improved from poor to good chemical status since the first RBMP (element swPrioritySubstanceImprovingChemicalStatus)  - The more stringent EQSs adopted in Directive 2013/39/EU caused the status of the surface water body to appear to deteriorate (element swPrioritySubstanceEffectStatusNewThresholds)  - The priority substance exceeds or is expected to exceed the EQS within the mixing zone (optional element swPrioritySubstanceExceedanceInMixingZone) |
| **Schema element**: swPrioritySubstanceCausingFailure  **Field type / facets / relationship**: YesNoCode\_Enum: Yes, No  **Properties**: maxOccurs =1 minOccurs = 1  **Guidance on completion of schema element**: Required. Indicate if the priority substance is causing failure to achieve good chemical status.  Information on exceedances from ubiquitous substances should be reported.  For substances for which EQS were made more stringent in the 2013 amendment of the EQS Directive (Anthracene, Brominated diphenylethers, Fluoranthene, Lead and its compounds, Naphthalene, Nickel and its compounds and Polyaromatic hydrocarbons (PAH)), exceedances of either the 2008 EQS or the 2013 EQS, or both, should be reported here. Exceedances of the latter should be reported even when swChemicalStatusValue is good on the basis of the less stringent 2008 standards, in order to enable the reporting of swPrioritySubstanceExceedanceType and, if appropriate, of swChemicalExemptionType and swChemicalExemptionPressure. The substances causing exceedances to the 2013 EQSs but not to the 2008 EQSs should also be reported under schema element swEffectStatusNewThresholds. See table at the end of this section of the guidance on different scenarios for these substances and the corresponding reporting values.  **Quality checks**: If swChemicalStatusValue is ‘3’, at least 1 substance should be reported as ‘Yes’ in swPrioritySubstanceCausingFailure.  The substances reported under swEffectStatusNewThresholds must be reported here as exceedances. |
| **Schema element**: swPrioritySubstanceExceedanceType  **Field type / facets / relationship**: EQStandardType\_Enum:  AA EQS  MAC EQS  Both  **Properties**: maxOccurs =1 minOccurs = 0  **Guidance on completion of schema element**: Conditional. For each Priority Substance exceeding EQS, indicate which EQS is exceeded.  ‘AA EQS’ = Annual Average of the EQS.  ‘MAC EQS’ = Maximum Allowable Concentration of the EQS.  ‘Both’ = Both.  **Quality checks**: Conditional check: report if ‘swPrioritySubstanceCausingFailure’ is ‘Yes’ |
| **Schema element**:swPrioritySubstanceImprovingChemicalStatus  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties**: maxOccurs = 1 minOccurs = 1  **Guidance on completion of schema element**: Required. Report whether the Priority Substance improved from poor to good chemical status since the first RBMP. For the Priority Substances for which the EQSs have changed in the 2013 amendment of the EQS Directive (2013/39/EU), the improvement should refer to the 2008 EQS. |
| **Schema element**:swPrioritySubstanceEffectStatusNewThresholds  **Field type / facets**: YesNoNotApplicable\_Union\_Enum: Yes, No, Not applicable  **Properties**: maxOccurs = 1 minOccurs = 1  **Guidance on completion of schema element**: Required. If the priority substance is one of the seven for which more stringent EQSs were adopted in Directive 2013/39/EU, indicate if the new standard caused the status of the surface water body to appear to deteriorate. If not one of the seven report ‘Not applicable’.  The assessment of failure according to the new, more stringent standards is relevant for the purpose of meeting the 2021 good chemical status objective as set in Article 3 paragraph 1a(i) of EQS Directive 2008/105/EC as amended by Directive 2013/39/EU.  **Quality checks**: The options ‘Yes’ and ‘No’ are only valid for the following seven priority substances: Anthracene, Brominated diphenylethers, Fluoranthene, Lead and its compounds, Naphthalene, Nickel and its compounds, Polyaromatic hydrocarbons (PAH). For all other priority substances the option ‘Not applicable’ must be reported. |
| **Schema element**:swPrioritySubstanceExceedanceInMixingZone  **Field type / facets:** YesNoCode\_Enum: Yes, No  **Properties**: maxOccurs = 1 minOccurs = 0  **Guidance on completion of schema element**: Optional. Report whether the Priority Substance exceeds or is expected to exceed the EQS within the Mixing Zone in the surface water body.  **Quality checks**: Reporting is possible only if ‘swMixingZones’ is ‘Yes’, |

The following class (child of SWPrioritySubstances) is used to report exemptions at priority substance level.

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| **Schema: SWB (continued)** |
| ***Class: SWChemicalExemptionType***  ***Properties****; max Occur: unbounded minOccur: 0*  *Conditional: report if ‘swPrioritySubstanceCausingFailure’ is ‘Yes’.* |
| **Schema element**: swChemicalExemptionType  **Field type / facets:** ExemptionType\_Enum (see Annex 8g)  **Properties:** maxOccurs = 1 minOccurs = 1  **Guidance on completion of schema element**: Required. Report which type(s) of exemption(s) apply if good chemical status is not expected to be achieved by 2015 for that priority substance. If there are exceedances of the EQSs made more stringent in 2013 (for substances Anthracene, Brominated diphenylethers, Fluoranthene, Lead and its compounds, Naphthalene, Nickel and its compounds and Polyaromatic hydrocarbons (PAH)), report which type(s) of exemption(s) apply if good chemical status is not expected to be achieved by 2021. More than one exemption may apply to a surface water body.  Article 4(6) exemptions can also be reported if relevant for chemical status (e.g. accidents).  Article 4(7) exemptions are not relevant for good chemical status and therefore cannot be reported.  **Quality checks**:  Within-schema check: The option 'No exemption' is not compatible with any other. Therefore, if reported, no more instances of ‘swChemicalExemptionType’ should be reported.  The options ‘Article4(7) - New modification’ and ‘Article4(7) - Sustainable human development’ are not valid for chemical status and therefore cannot be reported. |
| **Schema element**:swChemicalExemptionPressure  **Field type / facets**: SignificantPressureType\_Enum (see Annex 1a)  **Properties:** maxOccurs = unbounded minOccurs = 0  **Guidance on completion of schema element**: Conditional. If any Article 4(4) or 4(5) exemptions apply to this surface water body for chemical status, report the significant pressure(s) that are causing failure in order to justify the exemption(s).  **Quality checks**:Conditional check: If swChemicalExemptionType is not ‘No exemption’, at least one significant pressure type must be selected from the enumeration list.  The options ‘No significant pressure’ and ‘Not applicable’ are not valid. |

For substances XYZ (Anthracene, Brominated diphenylethers, Fluoranthene, Lead and its compounds, Naphthalene, Nickel and its compounds and Polyaromatic hydrocarbons (PAH)) for which EQS were made more stringent in the 2013 amendment of the EQS Directive, the following scenarios are possible. The table indicates the appropriate values for selected schema elements, according to each scenario:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Scenarios** | Scenario 1:  GCS is expected to be achieved in 2015 on the basis of both the 2008 and the 2013 EQSs | Scenario 2:  GCS is expected to be achieved in 2015 on the basis of the 2008 EQS but not on the basis of the 2013 EQS, which will be achieved only in 2021. | Scenario 3:  GCS is expected to be achieved in 2015 on the basis of the 2008 EQS but not on the basis of the 2013 EQS, which will be achieved only after 2021. | Scenario 4:  GCS is not achieved in 2015, neither on the basis of 2008 nor 2013 EQS and it is expected to be achieved only after 2021. |
| Is GCS expected to be achieved in 2015 on the basis of 2008 EQSs? | Yes | Yes | Yes | No |
| Is GCS expected to be achieved in 2015 on the basis of 2013 EQSs? | Yes | No | No | No |
| Is GCS expected to be achieved in 2021 on the basis of the 2013 EQSs? | Yes | Yes | No | No |
| **Selected schema element values** |  |  |  |  |
| swChemical StatusValue | =2 (good)\* | =2 (good) | =2 (good) | =3 (poor) |
| swChemicalStatus  ExpectedGoodIn2015 | Yes | Yes | Yes | No |
| swPrioritySubstance EffectStatusNewThresholds | No | Yes | Yes | No |
| swPrioritySubstance CausingFailure | No\* | Yes | Yes | Yes |
| swChemical ExemptionType | No exemption | No exemption | Select exemption type | Select exemption type |

GCS means Good Chemical Status.

Please note that this table includes only a selection of the elements in this part of the schema. The schema elements not included are to be reported in all scenarios if appropriate, according to the guidance provided.

\* In some cases swChemicalStatusValue could be 3 (poor), with GCS expected in 2015. See Guidance on completion of schema element swChemicalStatusExpectedGoodIn2015.

1. CIS Guidance Document No. 2: Identification of Water Bodies: <https://circabc.europa.eu/sd/a/655e3e31-3b5d-4053-be19-15bd22b15ba9/Guidance%20No%202%20-%20Identification%20of%20water%20bodies.pdf> [↑](#footnote-ref-2)
2. [CIS Guidance Document No 3](https://circabc.europa.eu/sd/a/7e01a7e0-9ccb-4f3d-8cec-aeef1335c2f7/Guidance%20No%203%20-%20pressures%20and%20impacts%20-%20IMPRESS%20(WG%202.1).pdf): Analysis of Pressures and Impacts: <https://circabc.europa.eu/sd/a/7e01a7e0-9ccb-4f3d-8cec-aeef1335c2f7/Guidance%20No%203%20-%20pressures%20and%20impacts%20-%20IMPRESS%20(WG%202.1).pdf> [↑](#footnote-ref-3)
3. It is recognised that detailed quantification of pressures is a challenging task in some cases and might not always be possible. [↑](#footnote-ref-4)
4. CIS Guidance Document No. 10: River and lakes - Typology, reference conditions and classification systems: <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. CIS Guidance Document No. 5: Transitional and Coastal Waters - Typology, Reference Conditions and Classification Systems: <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-6)
6. CIS Guidance Document No. 2: Identification of Water Bodies: <https://circabc.europa.eu/sd/a/655e3e31-3b5d-4053-be19-15bd22b15ba9/Guidance%20No%202%20-%20Identification%20of%20water%20bodies.pdf> [↑](#footnote-ref-7)
7. Member State’s 2-alpha character ISO country code: <http://publications.europa.eu/code/en/en-370100.htm> (Note: for Greece use ‘EL’ and United Kingdom use ‘UK’) [↑](#footnote-ref-8)
8. 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-9)
9. CIS Guidance Document No. 20: Exemptions to the Environmental Objectives: <https://circabc.europa.eu/sd/a/2a3ec00a-d0e6-405f-bf66-60e212555db1/Guidance_documentN%C2%B020_Mars09.pdf> [↑](#footnote-ref-10)
10. Please note that the multiplicity of the Class FailingRBSP is 0 to many. Therefore, if there are no RBSPs failing , this whole class does not need to be reported. [↑](#footnote-ref-11)
11. [Decision No 2455/2001/EC of the European Parliament and of the Council of 20 November 2001 establishing the list of priority substances in the field of water policy and amending Directive 2000/60/EC](http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32001D2455&rid=1) [↑](#footnote-ref-12)
12. [Directive 2008/105/EC of the European Parliament and of the Council of 16 December 2008 on environmental quality standards in the field of water policy, amending and subsequently repealing Council Directives 82/176/EEC, 83/513/EEC, 84/156/EEC, 84/491/EEC, 86/280/EEC and amending Directive 2000/60/EC of the European Parliament and of the Council](http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02008L0105-20130913&rid=1) [↑](#footnote-ref-13)
13. [Council Directive of 4 May 1976 on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community (76/464/EEC)](http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:01976L0464-20060324&rid=1) [↑](#footnote-ref-14)
14. [Commission Directive 2009/90/EC of 31 July 2009 laying down, pursuant to Directive 2000/60/EC of the European Parliament and of the Council, technical specifications for chemical analysis and monitoring of water status](http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009L0090&rid=1) [↑](#footnote-ref-15)
15. [Directive 2013/39/EU of the European Parliament and of the Council of 12 August 2013 amending Directives 2000/60/EC and 2008/105/EC as regards priority substances in the field of water policy](http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013L0039&rid=1) [↑](#footnote-ref-16)
16. 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-17)
17. Please note that the multiplicity of the Class SWPrioritySubstance is 0 to many. Therefore, if there are no priority substances to report for the relevant water body, this whole class does not need to be reported. [↑](#footnote-ref-18)