

Data Dictionary

Definition of

WISE-SoE reporting: Water Quality - Content

Data

dataset

Version: June 2015

European Environment Agency 

About this document

This document holds the technical specifications for a dataflow based on automatically generated output from the Data Dictionary application. The Data Dictionary is a central service for storing technical specifications for information requested in reporting obligations. The purpose of this document is to support countries in reporting good quality data. This document contains detailed specifications in a structured format for the data requested in a dataflow. Suggestions from users on how to improve the document are welcome.

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1. General information for WISE-SoE reporting: Water Quality - Content Data dataset

Basic metadata:

Short name	WISE-SoE_WaterQuality_ContentData
Version	June 2015
Definition	Content data on water quality in rivers, lakes and groundwater reported by countries within WISE-SoE reporting.
Short Description	Content data on water quality.
Contact information	European Topic Centre on Inland, Coastal and Marine waters ETC/ICM Anita Künitzer http://icm.eionet.europa.eu/
Planned updating frequency	1 year
Methodology for obtaining data	<p>*****</p> <p>Summary of changes in 2015</p> <p>*****</p> <p>WISE-SoE reporting of content data is harmonised as much as possible. Identical identification of determinands and identical rules for data processing incl. representation of samples and values below the limit of quantification are used for all levels of data (disaggregated data, data aggregated by monitoring sites, data aggregated by water bodies), all water categories (rivers, lakes, groundwater) and for all determinands (nutrients, hazardous substances, biology, other determinands).</p> <p>Raw disaggregated data are reported in the table DisaggregatedData. Data aggregated by monitoring sites are reported in the table AggregatedData. Data aggregated by water bodies are reported in the table AggregatedDataByWaterBody.</p> <p>Biological data (Ecological Quality Ratio values) in rivers and lakes are reported in the tables BiologyEQRData and BiologyEQRClassificationProcedure.</p> <p>Additional biological data (in original scale) for lakes are no longer reported in a separate table, but in the table AggregatedData.</p> <p>Codelists of Nutrients and Hazardous substances (incl. specification of Preferred SoE Nutrients and Hazardous substances) together with the Potentially high values of Mean for selected Nutrients are available on the public section of Forum in Excel table format: http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/wise-soe-reporting-2015/codelists-substances-water-quality-reporting</p> <p>*****</p> <p>*****</p> <p>The data requested through the WISE-SoE data collection process should be derived from existing national and/or regional monitoring programs within each EEA Member Country.</p> <p>Please consider the following when compiling your data delivery:</p> <ol style="list-style-type: none"> 1. Submit water quality data up to and including 2014. Do not supply any data for 2015. 2. The following data structure is requested: rivers and lakes - nutrients: data aggregated by monitoring sites, determinand and period (year) (table AggregatedData)

rivers and lakes - hazardous substances: disaggregated data are strongly preferred (table DisaggregatedData), data aggregated by monitoring sites, determinand and year are still acceptable (table AggregatedData)

rivers and lakes - biological data (EQR values): data aggregated by monitoring sites, determinand and period (year) (tables BiologyEQRData and BiologyEQRClassificationProcedure)

lakes - additional biological data: data aggregated by monitoring sites, determinand and period (year) (table AggregatedData)

groundwater - all nutrients, hazardous substances: disaggregated data (table DisaggregatedData)

groundwater - selected nutrients (nitrate, nitrite, ammonium, dissolved oxygen only): data aggregated by groundwater bodies, determinand and period (year) are still acceptable (table AggregatedDataByWaterBody)

3. DISAGGREGATED DATA ARE STRONGLY PREFERRED by the ETC/ICM in both cases where reporting of aggregated data is still acceptable as well (rivers and lakes: hazardous substances; groundwater: nitrate, nitrite, ammonium, dissolved oxygen) as they give more flexibility in statistical treatment. Data will be aggregated by the ETC/ICM before being published in Waterbase or used as the basis of assessment in the indicator factsheets or reports. Disaggregated data will not be published by the ETC/ICM.

4. All spatial objects used in the content data reporting (monitoring sites, water bodies) have to be provided within reporting of Spatial objects before (exception - this request is not valid for 2015 WISE-SoE Water quality Content data reporting).

5. In disaggregated data, sample concentrations below the limit of quantification should be indicated by the value "true" in the field "Observed value below LOQ" and limit of quantification value itself should be entered into the field "Observed Value".

6. When providing aggregated data (by monitoring sites or by water bodies), sample concentrations below the limits of quantification must be treated in a harmonized way pursuant to the 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 (QA/QC Directive): sample concentration values recorded as below the limit of quantification should be replaced with a value equivalent to HALF THE LIMIT OF QUANTIFICATION. (Article 5.1 of the QA/QC Directive). If a calculated mean value of the measurement results is below the limit of quantification, then the limit of quantification itself should be entered into the "Mean value" field and the boolean field "Mean value below LOQ" should be set to "true". Analogous rules are applied for the processing of minimum, maximum and median as well - see the methodology available on these fields.

7. In the case data aggregated by water bodies are reported, the aggregation process should consist of two phases:

a) aggregation of disaggregated data by substance, monitoring site and aggregation period (usually year)

b) aggregation of station's averages by substance, water body and aggregation period

Using these steps, the influence of all stations to the final water body result is equal, not regarding different number of samples in each station.

8. Please use meaningful number of decimal places in concentration field, reflecting the substance, measurement method and unit.

General recommendation:

Nutrients (unit usually mg/l): 1-3 decimal places

Hazardous substances (unit usually µg/l): 3-4 decimal places

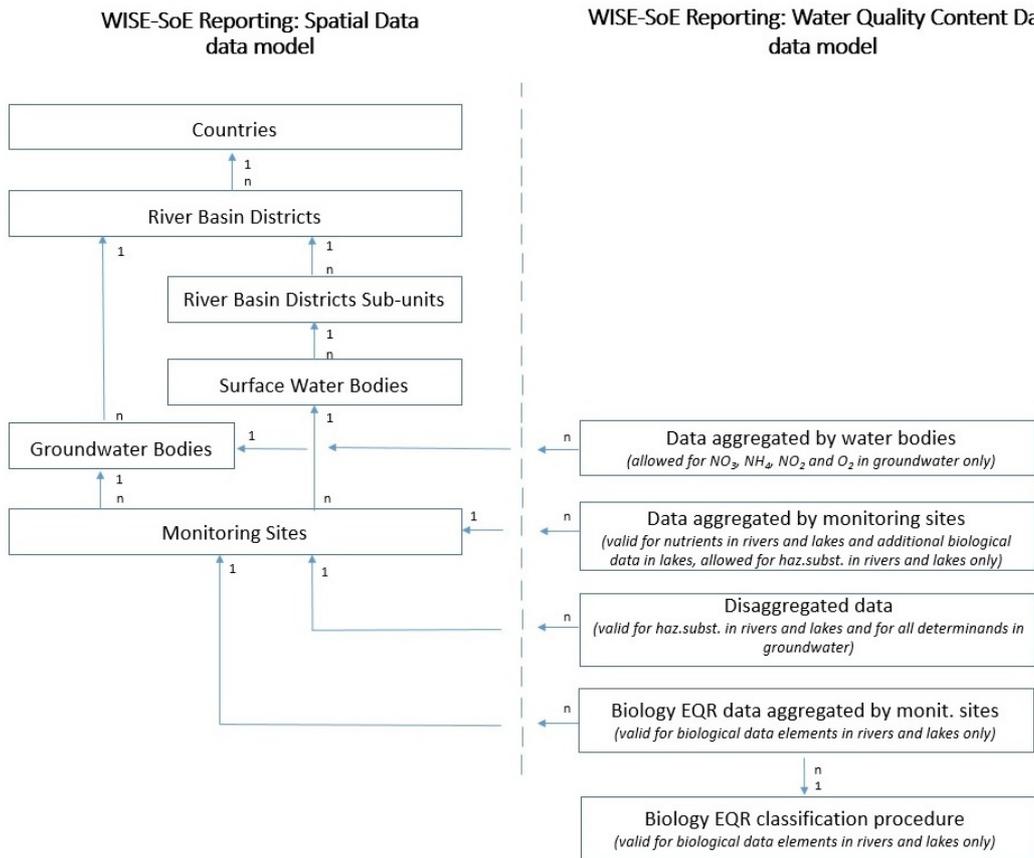
9. In case of disaggregated data reporting, DO NOT report the aggregated data resulting from identical disaggregated data anymore. Such redundant aggregated data are not taken into account. The disaggregated data are always preferred.

10. Provide as long time series of chemical and biological quality data, for as many determinands and as many monitoring sites as possible. Fill in any gaps in existing data.
11. Use the templates (MS Excel, XML schemas or MS Access) and these specifications to guide you in formatting and collating your data delivery. All are available for download from the data dictionary.
12. Supply data in MS Excel (preferred) or XML format. In the case of Excel format, xls files (= Excel 1997 – 2003) can be used only. Do not use xlsx files. Ensure dots, not commas are used as decimal separators. Please do not use formulas in Excel template fields, fill values only. MS Access files cannot be delivered directly, but have implemented functions for exporting data into MS Excel and XML format.
13. Upload your data files to your nominated repository: the Central Data Repository at <http://cdr.eionet.europa.eu/>
- If you have any questions about the format and content of the data request please contact WISE-SoE helpdesk, e-mail: wisesoe.helpdesk@eionet.europa.eu

2. Overview of WISE-SoE reporting: Water Quality - Content Data dataset tables

Name	Definition	Short description
Sample data by monitoring site	Raw disaggregated water quality data on the observed values (e.g. concentrations) of determinands in rivers, lakes and groundwater as reported by EEA Member Countries on an annual basis.	Raw disaggregated data on the observed values (e.g. concentrations) of determinands.
Annual sample statistics by monitoring site	Observed values (e.g. concentrations) of determinands on water quality aggregated by monitoring sites, determinand and year as reported by EEA Member Countries on an annual basis.	Observed values (e.g. concentrations) of determinands on water quality aggregated by monitoring sites, determinand and year.
Annual sample statistics by water body	Observed values (e.g. concentrations) of determinands on water quality aggregated by water body, determinand and year as reported by EEA Member Countries on an annual basis.	Observed values (e.g. concentrations) of determinands on water quality aggregated by water body, determinand and year.
Annual biology EQR data by monitoring site	Biological data from rivers and lakes (EQR) aggregated by monitoring sites, determinand and year.	Biological data from rivers and lakes (Ecological Quality Ratio) aggregated by monitoring sites, determinand and year.
Procedure for the classification of status from biology EQR data	Information on national classification system for each biological determinand and waterbody type, including boundaries of ecological status classes (and ecological potential classes, for artificial and / or heavily modified waterbodies).	Classification system for ecological status classes in rivers and lakes
	This table is valid for rivers and lakes biological data only.	

Datamodel for this dataset



3. Tables

3.1 Sample data by monitoring site table

Short name DisaggregatedData

Definition Raw disaggregated water quality data on the observed values (e.g. concentrations) of determinands in rivers, lakes and groundwater as reported by EEA Member Countries on an annual basis.

Short Description Raw disaggregated data on the observed values (e.g. concentrations) of determinands.

Methodology for obtaining data Disaggregated data should be reported for hazardous substances in rivers and lakes and for all determinands in groundwater.

Unique record in this table is created by combination of the fields "Monitoring site identifier", "Monitoring site identifier scheme", "Water body category code", "Determinand code", "Analysed fraction code", "Analysed media code" and "Sampling time (date)".

Unique specification of the monitoring site (combination of the fields "Monitoring site identifier" + "Monitoring site identifier scheme" + "Water body category code") has to be available in the table MonitoringSites in the WISE-SoE_WaterQuality_SpatialObjects reporting obligation.

Combination of the fields "Determinand code" + "Analysed fraction code" + "Analysed media code" is unique specification of the determinand.

Field "Unit of measure" has to be conformed with the appropriate parameter of given determinand as specified in the codelist for the field "Determinand code". This field is intended especially for checking purposes, to avoid unit error of the value reported in the field "Observed value".

Sample concentrations below the limit of quantification should be indicated by the "true" value in the field "Observed value below LOQ" and limit of quantification value itself should be entered into the field "Observed value".

Fields "CEN/ISO analytical method code" and "Sample depth" are valid for rivers and lakes data only.

Columns in **Sample data by monitoring site** table:

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	Column name	Column definition	Methodology	Data specifications
3.1.1	Monitoring Site Identifier (monitoringSiteIdentifier)	<p>Unique international identifier of the water quality / water quantity monitoring site in which data are sampled.</p> <p>If the site was reported as WFD Art.8 monitoring site, enter the WFD identifier of the site (EUSWMonitoringSiteCode for rivers and lakes monitoring sites, EUGWMonitoringSiteCode for groundwater monitoring sites)</p> <p>If the site was not reported as WFD Art.8 monitoring site, enter the EIONET international identifier of the site.</p>	<p>This is a required, not null field.</p> <p>Monitoring Site Identifier is unique value in the list of monitoring sites for specific Water body category value.</p> <p>First 2 characters must be the Member State's 2-alpha character ISO country code (Greece = 'EL'. United Kingdom = 'UK').</p> <p>National characters can not be used.</p> <p>Creation of the EIONET international identifier for rivers and lakes monitoring sites: enter National station ID if the Member State's 2-alpha character ISO country code is used as first 2 characters in this code, otherwise add country code as the prefix to the NationalSiteID. Example: country: Austria, NationalStationID: ST_123 => MonitoringSiteID: ATST_123</p> <p>For groundwater monitoring sites, use the international identifier of the groundwater monitoring site (former element Station_ID).</p>	Datatype: string Minimum size: 3 Maximum size: 42
3.1.2	Monitoring site identifier scheme (monitoringSiteIdentifierScheme)	Specification, whether ID of the monitoring site is WFD identifier or EIONET identifier.	This is a required, not null field.	string codelist: see section 4
3.1.3	Water body category code (parameterWaterBodyCategory)	Water body category code, as defined in the codelist.	This is a required, not null field.	string codelist: see section 4

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	Column name	Column definition	Methodology	Data specifications
3.1.4	Determinand Code (observedPropertyDeterminandCode)	CAS code or EEA code of the determinand monitored, as defined in the codelist.	<p>This is a required, not null field.</p> <p>Provide the CAS code of the determinand available in the codelist (prefix "CAS_").</p> <p>If the CAS code of the determinand does not exist, use the EEA code specified in the codelist (prefix "EEA_").</p> <p>!!! Example of the codelist filled only...</p>	integer codelist: see section 4
3.1.5	Analysed fraction code (procedureAnalysedFraction)	Specification whether total (unfiltered) or dissolved (filtered) fraction of the sample was analysed.	<p>This is a required, not null field.</p>	string codelist: see section 4
3.1.6	Analysed media specification (procedureAnalysedMedia)	Type of media monitored.	<p>This is a required, not null field.</p>	string codelist: see section 4
3.1.7	Sampling time (date) (phenomenonTimeSamplingDate)	Date in which the sample was taken.	<p>This is a required, not null field.</p> <p>Use the format YYYY-MM-DD</p>	Datatype: date
3.1.8	Observed value below LOQ (resultQualityObservedValueBelowLOQ)	Flag to indicate sample below analytical limit of quantification (LOQ).	<p>This is a required, not null field.</p> <p>Set the value "true" if sample concentration value is below the the limit of quantification.</p> <p>The value "false" should be used in cases where the value is above or equal LOQ but also where LOQ is not applicable (e.g. pH, temperature, ...)</p>	boolean codelist: see section 4

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	Column name	Column definition	Methodology	Data specifications
3.1.9	Observed value (resultObservedValue)	Observed value (e.g. concentration) of determinand in sample (zero and negative values should not be supplied). EXCEPTIONS: Zero value is allowed for Dissolved oxygen and HCO ₃ . In case the determinand is Temperature, minimum value up to -3 is allowed for seawater temperature only.	This is a required, not null field. If the sample concentration value is below the limit of quantification, enter the limit of quantification value itself into the "Observed value" field and fill the field "Observed value below LOQ" with the value "True". Rivers, Lakes: For data aggregated from sub-sites, enter the mean concentration of the samples.	Datatype: decimal Maximum size: 9 Minimum inclusive value: -3 Decimal precision: 6
3.1.10	Unit of measure (resultUom)	Unit of measure, as specified for given determinand in the Determinand code codelist.	This is a required, not null field. Unit specified for given determinand in the Determinand code codelist can be used only. !!! Codelist is not completed yet...	string codelist: see section 4
3.1.11	Limit of quantification (procedureLOQValue)	The smallest concentration that can be distinguished from the analytical blank at a chosen level of statistical confidence (usually 95%).	This is a required, not null field except for determinands where LOQ is not applicable (pH, temperature, ...). Aggregated data reporting: In case of using different limits within the aggregation period, please enter the highest LOQ value.	Datatype: float
3.1.12	Sample depth (parameterSampleDepth)	Depth at which sample was taken in meter below water surface. Valid for rivers and lakes data only.	For surface concentrations, enter value 0. Rivers, Lakes: This field is required for distinct measurements. In case of aggregated data please provide average sample depth.	Datatype: float Minimum inclusive value: 0 Unit: m
3.1.13	CEN/ISO analytical method code (procedureAnalyticalMethod)	CEN/ISO code of the analytical method. Valid for rivers and lakes data only (Water body category = RW, LW).	See the CEN/ISO code list for suggested values. If the option "Other analytical method" is used, please describe the method in the field Remarks.	Datatype: string Minimum size: 0 Maximum size: 255

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	Column name	Column definition	Methodology	Data specifications
3.1.14	Remarks (Remarks)	Remarks, comments or explanatory notes (free text).	Rivers, Lakes, Groundwater quality - content data tables: Enter the text "value confirmed" into the Remarks field in the case you are sure the value exceeding the Potentially high value is correct. Lists of these high values for selected substances are available on the Forum folder: http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/wise-soe-reporting-2015/codelists-substances-water-quality-reporting	Datatype: string Minimum size: 0 Maximum size: 255

3.2 Annual sample statistics by monitoring site table

Short name AggregatedData

Definition Observed values (e.g. concentrations) of determinands on water quality aggregated by monitoring sites, determinand and year as reported by EEA Member Countries on an annual basis.

Short Description Observed values (e.g. concentrations) of determinands on water quality aggregated by monitoring sites, determinand and year.

Methodology for obtaining data Data aggregated by monitoring sites, determinand and year should be reported for nutrients and for selected biological determinands in rivers and lakes. Reporting of such data is still allowed also for hazardous substances in rivers and lakes, although reporting of disaggregated data is strongly preferred.

Unique record in this table is created by combination of the fields "Monitoring site identifier", "Monitoring site identifier scheme", "Water body category code", "Determinand code", "Analysed fraction code", "Analysed media code" and "Reference period (year)".

Unique specification of the monitoring site (combination of the fields "Monitoring site identifier" + "Monitoring site identifier scheme" + "Water body category code") has to be available in the table MonitoringSites in the WISE-SoE_WaterQuality_SpatialObjects reporting obligation.

Combination of the fields "Determinand code" + "Analysed fraction code" + "Analysed media code" is unique specification of the determinand.

Field "Unit of measure" has to be conformed with the appropriate unit of given determinand as specified in the codelist for the field "Determinand code". This field is intended especially for checking purposes, to avoid unit error of the values reported in the fields "Minimum value", "Mean value", "Maximum value" and "Median value".

On aggregation, sample concentration values recorded as below the limit of quantification should be replaced with a value equivalent to HALF THE LIMIT OF QUANTIFICATION.

According to the Directive 2009/90/EC ("new EQS directive", technical specifications for chemical analysis and monitoring of water status), following rules should be applied on data aggregation:

If minimum concentration value of the input data used for aggregation is below the limit of quantification, enter the limit of quantification itself into the "Minimum value" field and set the field "Minimum value below LOQ" to the value "true".

If a calculated mean value of the measurement results is below the limit of quantification, enter the limit of quantification itself into the "Mean value" field and set the field "Mean value below LOQ" to the value "true".

If maximum concentration value of the input data used for aggregation is below the limit of quantification, enter the limit of quantification itself into the "Maximum value" field and set the field "Maximum value below LOQ" to the value "true".

If calculated median value of concentration is below the limit of quantification, enter the limit of quantification itself into the "Median value" field and set the field "Median value below LOQ" to the value "true".

If one disaggregated input sample is available only for given determinand, monitoring site and year, please enter the value of this sample to the fields "Minimum value", "Mean value", "Maximum value" and "Median value".

Columns in **Annual sample statistics by monitoring site** table:

	Column name	Column definition	Methodology	Data specifications
3.2.1	Monitoring Site Identifier (monitoringSiteIdentifier)	<p>Unique international identifier of the water quality / water quantity monitoring site in which data are sampled.</p> <p>If the site was reported as WFD Art.8 monitoring site, enter the WFD identifier of the site (EUSWMonitoringSiteCode for rivers and lakes monitoring sites, EUGWMonitoringSiteCode for groundwater monitoring sites)</p> <p>If the site was not reported as WFD Art.8 monitoring site, enter the EIONET international identifier of the site.</p>	<p>This is a required, not null field.</p> <p>Monitoring Site Identifier is unique value in the list of monitoring sites for specific Water body category value.</p> <p>First 2 characters must be the Member State's 2-alpha character ISO country code (Greece = 'EL'. United Kingdom = 'UK').</p> <p>National characters can not be used.</p> <p>Creation of the EIONET international identifier for rivers and lakes monitoring sites: enter National station ID if the Member State's 2-alpha character ISO country code is used as first 2 characters in this code, otherwise add country code as the prefix to the NationalSiteID. Example: country: Austria, NationalStationID: ST_123 => MonitoringSiteID: ATST_123</p> <p>For groundwater monitoring sites, use the international identifier of the groundwater monitoring site (former element Station_ID).</p>	<p>Datatype: string Minimum size: 3 Maximum size: 42</p>
3.2.2	Monitoring site identifier scheme (monitoringSiteIdentifierScheme)	<p>Specification, whether ID of the monitoring site is WFD identifier or EIONET identifier.</p>	<p>This is a required, not null field.</p>	<p>string codelist: see section 4</p>

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	Column name	Column definition	Methodology	Data specifications
3.2.3	Water body category code (parameterWaterBodyCategory)	Water body category code, as defined in the codelist.	This is a required, not null field.	string codelist: see section 4
3.2.4	Determinand Code (observedPropertyDeterminandCode)	CAS code or EEA code of the determinand monitored, as defined in the codelist.	This is a required, not null field. Provide the CAS code of the determinand available in the codelist (prefix "CAS_"). If the CAS code of the determinand does not exist, use the EEA code specified in the codelist (prefix "EEA_"). !!! Example of the codelist filled only...	integer codelist: see section 4
3.2.5	Analysed fraction code (procedureAnalysedFraction)	Specification whether total (unfiltered) or dissolved (filtered) fraction of the sample was analysed.	This is a required, not null field.	string codelist: see section 4
3.2.6	Analysed media specification (procedureAnalysedMedia)	Type of media monitored.	This is a required, not null field.	string codelist: see section 4
3.2.7	Unit of measure (resultUom)	Unit of measure, as specified for given determinand in the Determinand code codelist.	This is a required, not null field. Unit specified for given determinand in the Determinand code codelist can be used only. !!! Codelist is not completed yet...	string codelist: see section 4
3.2.8	Reference period (year) (phenomenonTimeReferencePeriod)	Year of aggregation period for aggregated data sets in format YYYY.	This is a required, not null field. Year should be no later than that requested in the latest data request.	Datatype: integer Maximum size: 4 Minimum inclusive value: 1800 Maximum inclusive value: 2014

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	Column name	Column definition	Methodology	Data specifications
3.2.9	Sampling period (parameterSamplingPeriod)	The period within one year during which the input data used for aggregation were sampled	Use the format YYYY-MM-DD--YYYY-MM-DD or YYYY-MM--YYYY-MM (if the days are not exactly known or are not significant). If the the input data have been sampled during the entire year or are representative for the entire year, fill YYYY-01-01--YYYY-12-31	Datatype: string Minimum size: 0 Maximum size: 22
3.2.10	Limit of quantification (procedureLOQValue)	The smallest concentration that can be distinguished from the analytical blank at a chosen level of statistical confidence (usually 95%).	This is a required, not null field except for determinands where LOQ is not applicable (pH, temperature, ...). Aggregated data reporting: In case of using different limits within the aggregation period, please enter the highest LOQ value.	Datatype: float
3.2.11	Number of Samples (resultNumberOfSamples)	Number of samples included in aggregated data.	This is a required, not null field.	Datatype: integer Maximum size: 4 Minimum inclusive value: 1
3.2.12	Number of samples below LOQ (resultQualityNumberOfSamplesBelowLOQ)	Number of samples below Limit of quantification included in aggregated data.	Hazardous substances: This is a required, not null field. Nutrients: Voluntary.	Datatype: integer Maximum size: 4
3.2.13	Minimum value below LOQ (resultQualityMinimumBelowLOQ)	Flag to indicate that minimum concentration value of the input data used for aggregation is below analytical limit of quantification (LOQ).	This is a required, not null field. Set the value "true" if minimum concentration value of the input data used for aggregation is below the limit of quantification. Set the value "false" in other cases. The value "false" should be used in cases where the value is above LOQ but also where LOQ is not applicable (e.g. pH, temperature, ...)	boolean codelist: see section 4

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	Column name	Column definition	Methodology	Data specifications
3.2.14	Minimum value (resultMinimumValue)	Minimum concentration value of the input data used for aggregation.	<p>This is a required, not null field.</p> <p>If minimum concentration value of the input data used for aggregation is below the limit of quantification, enter the limit of quantification itself into the "Minimum value" field and set the field "Minimum value below LOQ" to the value "true".</p> <p>If the aggregated data record is based on only one sample, enter the value of this sample.</p>	Datatype: float
3.2.15	Mean value below LOQ (resultQualityMeanBelowLOQ)	Flag to indicate that calculated mean concentration value is below the analytical limit of quantification (LOQ).	<p>This is a required, not null field.</p> <p>Set the value "true" if mean concentration value of the input data used for aggregation is below the limit of quantification.</p> <p>The value "false" should be used in cases where the value is above LOQ but also where LOQ is not applicable (e.g. pH, temperature, ...).</p>	boolean codelist: see section 4
3.2.16	Mean value (resultMeanValue)	Mean concentration value of aggregated data.	<p>This is a required, not null field.</p> <p>On aggregation, input concentration value recorded as below the limit of quantification should be replaced with a value equivalent to half the limit of quantification.</p> <p>If calculated mean value of concentration is below the limit of quantification, enter the limit of quantification itself into the "Mean value" field and set the field "Mean value below LOQ" to the value "true".</p> <p>If the aggregated data record is based on only one sample, enter the value of this sample.</p>	Datatype: float

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	Column name	Column definition	Methodology	Data specifications
3.2.17	Maximum value below LOQ (resultQualityMaximumBelowLOQ)	Flag to indicate that maximum concentration value of the input data used for aggregation is below analytical limit of quantification (LOQ).	<p>This is a required, not null field.</p> <p>Set the value "true" if maximum concentration value of the input data used for aggregation is below the limit of quantification.</p> <p>The value "false" should be used in cases where the value is above LOQ but also where LOQ is not applicable (e.g. pH, temperature, ...).</p>	boolean codelist: see section 4
3.2.18	Maximum value (resultMaximumValue)	Maximum concentration value of the input data used for aggregation.	<p>This is a required, not null field.</p> <p>If maximum concentration value of the input data used for aggregation is below the limit of quantification, enter the limit of quantification itself into the Maximum field and set the field "Maximum value below LOQ" to the value "true".</p> <p>If the aggregated data record is based on only one sample, enter the value of this sample.</p>	Datatype: float
3.2.19	Median value below LOQ (resultQualityMedianBelowLOQ)	Flag to indicate that median concentration value of the input data used for aggregation is below analytical limit of quantification (LOQ).	<p>This is a required, not null field.</p> <p>Set the value "true" if median concentration value of the input data used for aggregation is below the limit of quantification.</p> <p>The value "false" should be used in cases where the value is above LOQ but also where LOQ is not applicable (e.g. pH, temperature, ...).</p>	boolean codelist: see section 4

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	Column name	Column definition	Methodology	Data specifications
3.2.20	Median value (resultMedianValue)	Median concentration value of aggregated data.	<p>This is a required, not null field.</p> <p>If calculated median value of concentration is below the limit of quantification, enter the limit of quantification itself into the Median field and set the field "Median value below LOQ" to the value "true".</p> <p>If the aggregated data record is based on only one sample, enter the value of this sample.</p>	Datatype: float
3.2.21	Sample standard deviation value (resultStandardDeviationValue)	Standard deviation of concentration values of aggregated data.	On aggregation, sample concentration values recorded as below the limit of quantification should be replaced with a value equivalent to half the limit of quantification.	Datatype: float Minimum inclusive value: 0
3.2.22	CEN/ISO analytical method code (procedureAnalyticalMethod)	CEN/ISO code of the analytical method. Valid for rivers and lakes data only (Water body category = RW, LW).	See the CEN/ISO code list for suggested values. If the option "Other analytical method" is used, please describe the method in the field Remarks.	Datatype: string Minimum size: 0 Maximum size: 255
3.2.23	Sample depth (parameterSampleDepth)	Depth at which sample was taken in meter below water surface. Valid for rivers and lakes data only.	<p>For surface concentrations, enter value 0.</p> <p>Rivers, Lakes: This field is required for distinct measurements. In case of aggregated data please provide average sample depth.</p>	Datatype: float Minimum inclusive value: 0 Unit: m
3.2.24	Remarks (Remarks)	Remarks, comments or explanatory notes (free text).	<p>Rivers, Lakes, Groundwater quality - content data tables: Enter the text "value confirmed" into the Remarks field in the case you are sure the value exceeding the Potentially high value is correct. Lists of these high values for selected substances are available on the Forum folder:</p> <p>http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/wise-soe-reporting-2015/codelists-substances-water-quality-reporting</p>	Datatype: string Minimum size: 0 Maximum size: 255

3.3 Annual sample statistics by water body table

Short name AggregatedDataByWaterBody

Definition Observed values (e.g. concentrations) of determinands on water quality aggregated by water body, determinand and year as reported by EEA Member Countries on an annual basis.

Short Description Observed values (e.g. concentrations) of determinands on water quality aggregated by water body, determinand and year.

Methodology for obtaining data Reporting of data aggregated by water bodies, determinand and year is still allowed for concentrations of selected SoE nutrients (nitrate, nitrite, ammonium, dissolved oxygen) in groundwater only, although reporting of these determinands in disaggregated data structure is strongly preferred.

Unique record in this table is created by combination of the fields "Water body identifier", "Water body identifier scheme", "Water body category code", "Determinand code", "Analysed fraction code", "Analysed media code" and "Reference period (year)".

Unique specification of the water body (combination of the fields "Water body identifier" + "Water body identifier scheme" + "Water body category code") has to be available in the table GroundwaterBodies (for Water body category = GW) in the WISE-SoE_WaterQuality_SpatialObjects reporting obligation.

Combination of the fields "Determinand code" + "Analysed fraction code" + "Analysed media code" is unique specification of the determinand.

Field "Unit of measure" has to be conformed with the appropriate unit of given determinand as specified in the codelist for the field "Determinand code". This field is intended especially for checking purposes, to avoid unit error of the values reported in the fields "Minimum value", "Mean value", "Maximum value" and "Median value".

On aggregation, sample concentration values recorded as below the limit of quantification should be replaced with a value equivalent to HALF THE LIMIT OF QUANTIFICATION.

According to the Directive 2009/90/EC ("new EQS directive", technical specifications for chemical analysis and monitoring of water status), following rules should be applied on data aggregation:

If minimum concentration value of the input data used for aggregation is below the limit of quantification, enter the limit of quantification itself into the "Minimum value" field and set the field "Minimum value below LOQ" to the value "true".

If a calculated mean value of the measurement results is below the limit of quantification, enter the limit of quantification itself into the "Mean value" field and set the field "Mean value below LOQ" to the value "true".

If maximum concentration value of the input data used for aggregation is below the limit of quantification, enter the limit of quantification itself into the "Maximum value" field and set the field "Maximum value below LOQ" to the value "true".

If calculated median value of concentration is below the limit of quantification, enter the limit of quantification itself into the "Median value" field and set the field "Median value below LOQ" to the value "true".

Columns in **Annual sample statistics by water body** table:

	Column name	Column definition	Methodology	Data specifications
3.3.1	Water body identifier (waterBodyIdentifier)	<p>Unique international identifier of the water body by which the data are aggregated.</p> <p>If the water body was reported as WFD water body, enter WFD identifier of the water body (EUSurfaceWaterBodyCode for rivers and lakes water bodies, EUGroundwaterBodyCode for groundwater bodies)</p> <p>If water body was not reported as WFD water body, enter the EIONET international identifier of the water body.</p>	<p>This is a required, not null field.</p> <p>Water body identifier is the unique value in the list of water bodies for specific Water body category value.</p> <p>First 2 characters must be the Member State's 2-alpha character ISO country code (Greece = 'EL'. United Kingdom = 'UK').</p> <p>National characters can not be used.</p> <p>Creation of the EIONET international identifier for rivers and lakes water bodies: enter National water body ID if the Member State's 2-alpha character ISO country code is used as first 2 characters in this code, otherwise add country code as the prefix to the NationalWaterBodyID. Example: country: Austria, National water body ID: WB_abc => WaterBody_ID: ATWB_abc</p> <p>For EIONET groundwater bodies, use the international identifier of the EIONET groundwater body (former element GWB-Code-EIONET).</p>	<p>Datatype: string Minimum size: 3 Maximum size: 42</p>
3.3.2	Water body identifier scheme (waterBodyIdentifierScheme)	Specification, whether ID of the water body is WFD identifier or EIONET identifier.	This is a required, not null field.	string codelist: see section 4
3.3.3	Water body category code (parameterWaterBodyCategory)	Water body category code, as defined in the codelist.	This is a required, not null field.	string codelist: see section 4

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	Column name	Column definition	Methodology	Data specifications
3.3.4	Determinand Code (observedPropertyDeterminandCode)	CAS code or EEA code of the determinand monitored, as defined in the codelist.	<p>This is a required, not null field.</p> <p>Provide the CAS code of the determinand available in the codelist (prefix "CAS_").</p> <p>If the CAS code of the determinand does not exist, use the EEA code specified in the codelist (prefix "EEA_").</p> <p>!!! Example of the codelist filled only...</p>	integer codelist: see section 4
3.3.5	Analysed fraction code (procedureAnalysedFraction)	Specification whether total (unfiltered) or dissolved (filtered) fraction of the sample was analysed.	<p>This is a required, not null field.</p>	string codelist: see section 4
3.3.6	Analysed media specification (procedureAnalysedMedia)	Type of media monitored.	<p>This is a required, not null field.</p>	string codelist: see section 4
3.3.7	Unit of measure (resultUom)	Unit of measure, as specified for given determinand in the Determinand code codelist.	<p>This is a required, not null field.</p> <p>Unit specified for given determinand in the Determinand code codelist can be used only.</p> <p>!!! Codelist is not completed yet...</p>	string codelist: see section 4
3.3.8	Reference period (year) (phenomenonTimeReferencePeriod)	Year of aggregation period for aggregated data sets in format YYYY.	<p>This is a required, not null field.</p> <p>Year should be no later than that requested in the latest data request.</p>	Datatype: integer Maximum size: 4 Minimum inclusive value: 1800 Maximum inclusive value: 2014
3.3.9	Sampling period (parameterSamplingPeriod)	The period within one year during which the input data used for aggregation were sampled	<p>Use the format YYYY-MM-DD--YYYY-MM-DD or YYYY-MM--YYYY-MM (if the days are not exactly known or are not significant).</p> <p>If the the input data have been sampled during the entire year or are representative for the entire year, fill YYYY-01-01--YYYY-12-31</p>	Datatype: string Minimum size: 0 Maximum size: 22

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Dataset specification for WISE-SoE reporting: Water Quality - Content Data * Version June 2015 * created 26/06/2015

Column name	Column definition	Methodology	Data specifications
3.3.10	Limit of quantification (procedureLOQValue)	The smallest concentration that can be distinguished from the analytical blank at a chosen level of statistical confidence (usually 95%).	Datatype: float
3.3.11	Number of Samples (resultNumberOfSamples)	Number of samples included in aggregated data.	Datatype: integer Maximum size: 4 Minimum inclusive value: 1
3.3.12	Number of samples below LOQ (resultQualityNumberOfSamplesBelowLOQ)	Number of samples below Limit of quantification included in aggregated data.	Datatype: integer Maximum size: 4
3.3.13	Minimum value below LOQ (resultQualityMinimumBelowLOQ)	Flag to indicate that minimum concentration value of the input data used for aggregation is below analytical limit of quantification (LOQ).	boolean codelist: see section 4
3.3.14	Minimum value (resultMinimumValue)	Minimum concentration value of the input data used for aggregation.	Datatype: float

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Dataset specification for WISE-SoE reporting: Water Quality - Content Data * Version June 2015 * created 26/06/2015

	Column name	Column definition	Methodology	Data specifications
3.3.15	Mean value below LOQ (resultQualityMeanBelowLOQ)	Flag to indicate that calculated mean concentration value is below the analytical limit of quantification (LOQ).	<p>This is a required, not null field.</p> <p>Set the value "true" if mean concentration value of the input data used for aggregation is below the limit of quantification.</p> <p>The value "false" should be used in cases where the value is above LOQ but also where LOQ is not applicable (e.g. pH, temperature, ...).</p>	boolean codelist: see section 4
3.3.16	Mean value (resultMeanValue)	Mean concentration value of aggregated data.	<p>This is a required, not null field.</p> <p>On aggregation, input concentration value recorded as below the limit of quantification should be replaced with a value equivalent to half the limit of quantification.</p> <p>If calculated mean value of concentration is below the limit of quantification, enter the limit of quantification itself into the "Mean value" field and set the field "Mean value below LOQ" to the value "true".</p> <p>If the aggregated data record is based on only one sample, enter the value of this sample.</p>	Datatype: float
3.3.17	Maximum value below LOQ (resultQualityMaximumBelowLOQ)	Flag to indicate that maximum concentration value of the input data used for aggregation is below analytical limit of quantification (LOQ).	<p>This is a required, not null field.</p> <p>Set the value "true" if maximum concentration value of the input data used for aggregation is below the limit of quantification.</p> <p>The value "false" should be used in cases where the value is above LOQ but also where LOQ is not applicable (e.g. pH, temperature, ...).</p>	boolean codelist: see section 4

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	Column name	Column definition	Methodology	Data specifications
3.3.18	Maximum value (resultMaximumValue)	Maximum concentration value of the input data used for aggregation.	<p>This is a required, not null field.</p> <p>If maximum concentration value of the input data used for aggregation is below the limit of quantification, enter the limit of quantification itself into the Maximum field and set the field "Maximum value below LOQ" to the value "true".</p> <p>If the aggregated data record is based on only one sample, enter the value of this sample.</p>	Datatype: float
3.3.19	Median value below LOQ (resultQualityMedianBelowLOQ)	Flag to indicate that median concentration value of the input data used for aggregation is below analytical limit of quantification (LOQ).	<p>This is a required, not null field.</p> <p>Set the value "true" if median concentration value of the input data used for aggregation is below the limit of quantification.</p> <p>The value "false" should be used in cases where the value is above LOQ but also where LOQ is not applicable (e.g. pH, temperature, ...).</p>	boolean codelist: see section 4
3.3.20	Median value (resultMedianValue)	Median concentration value of aggregated data.	<p>This is a required, not null field.</p> <p>If calculated median value of concentration is below the limit of quantification, enter the limit of quantification itself into the Median field and set the field "Median value below LOQ" to the value "true".</p> <p>If the aggregated data record is based on only one sample, enter the value of this sample.</p>	Datatype: float
3.3.21	Sample standard deviation value (resultStandardDeviationValue)	Standard deviation of concentration values of aggregated data.	<p>On aggregation, sample concentration values recorded as below the limit of quantification should be replaced with a value equivalent to half the limit of quantification.</p>	Datatype: float Minimum inclusive value: 0

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	Column name	Column definition	Methodology	Data specifications
3.3.22	Number of sites in Class 1 (resultNumberOfSitesClass1)	<p>Required for nitrate, nitrite, ammonium and dissolved oxygen in groundwater only.</p> <p>The number of sampling sites with average concentration of disaggregated values of:</p> <p>Ammonium <= 0.1 mg/l</p> <p>Dissolved Oxygen <= 2 mg/l</p> <p>Nitrate <= 10 mg/l</p> <p>Nitrite <= 0.01 mg/l</p> <p>within the aggregation period.</p>	This is a required, not null field for nitrate, nitrite, ammonium and dissolved oxygen in groundwater only.	Datatype: integer Maximum size: 5 Minimum inclusive value: 0
3.3.23	Number of sites in Class 2 (resultNumberOfSitesClass2)	<p>Required for nitrate, nitrite, ammonium and dissolved oxygen in groundwater only.</p> <p>The number of sampling sites with average concentration of disaggregated values of:</p> <p>Ammonium between > 0.1 and <= 0.3 mg/l</p> <p>Dissolved Oxygen between > 2 and <= 5 mg/l</p> <p>Nitrate between > 10 and <= 25 mg/l</p> <p>Nitrite between > 0.01 and <= 0.03 mg/l</p> <p>within the aggregation period.</p>	This is a required, not null field for nitrate, nitrite, ammonium and dissolved oxygen in groundwater only.	Datatype: integer Maximum size: 5 Minimum inclusive value: 0

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	Column name	Column definition	Methodology	Data specifications
3.3.24	Number of sites in Class 3 (resultNumberOfSitesClass3)	<p>Required for nitrate, nitrite, ammonium and dissolved oxygen in groundwater only.</p> <p>The number of sampling sites with average concentration of disaggregated values of:</p> <p>Ammonium between > 0.3 and <= 0.5 mg/l</p> <p>Dissolved Oxygen > 5 mg/l</p> <p>Nitrate between > 25 and <= 50 mg/l</p> <p>Nitrite between > 0.03 and <= 0.06 mg/l</p> <p>within the aggregation period.</p>	This is a required, not null field for nitrate, nitrite, ammonium and dissolved oxygen in groundwater only.	Datatype: integer Maximum size: 5 Minimum inclusive value: 0
3.3.25	Number of sites in Class 4 (resultNumberOfSitesClass4)	<p>Required for nitrate, nitrite and ammonium in groundwater only.</p> <p>The number of sampling sites with average concentration of disaggregated values of:</p> <p>Ammonium > 0.5 mg/l</p> <p>Dissolved Oxygen - not relevant, keep blank</p> <p>Nitrate > 50 mg/l</p> <p>Nitrite between > 0.06 and <= 0.1 mg/l</p> <p>within the aggregation period.</p>	This is a required, not null field for nitrate, nitrite and ammonium in groundwater only.	Datatype: integer Maximum size: 5 Minimum inclusive value: 0

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	Column name	Column definition	Methodology	Data specifications
3.3.26	Number of sites in Class 5 (resultNumberOfSitesClass5)	<p>Required for nitrite in groundwater only.</p> <p>The number of sampling sites with average concentration of disaggregated values of:</p> <p>Ammonium - not relevant, keep blank</p> <p>Dissolved Oxygen - not relevant, keep blank</p> <p>Nitrate - not relevant, keep blank</p> <p>Nitrite > 0.1 mg/l</p> <p>within the aggregation period.</p>	This is a required, not null field for nitrite in groundwater only.	Datatype: integer Maximum size: 5 Minimum inclusive value: 0
3.3.27	Remarks (Remarks)	Remarks, comments or explanatory notes (free text).	<p>Rivers, Lakes, Groundwater quality - content data tables: Enter the text "value confirmed" into the Remarks field in the case you are sure the value exceeding the Potentially high value is correct. Lists of these high values for selected substances are available on the Forum folder:</p> <p>http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/wise-soe-reporting-2015/codelists-substances-water-quality-reporting</p>	Datatype: string Minimum size: 0 Maximum size: 255

3.4 Annual biology EQR data by monitoring site table

Short name BiologyEQRData

Definition Biological data from rivers and lakes (EQR) aggregated by monitoring sites, determinand and year.

Short Description Biological data from rivers and lakes (Ecological Quality Ratio) aggregated by monitoring sites, determinand and year.

Methodology for obtaining data Biological data should preferably be reported as national EQRs (Ecological Quality Ratio) which are specific for an impact type (eutrophication, acidification etc.). Please report only one type of national EQR for each BQE (Biological Quality Element) and impact type. Normalised EQR values should be reported in addition, if possible.

Unique record in this table is created by combination of the fields "Monitoring site identifier", "Monitoring site identifier scheme", "Water body category code", "Determinand code for biology data (Impact-specific BQE)" and "Reference period (year)".

Unique specification of the monitoring site (combination of the fields "Monitoring site identifier" + "Monitoring site identifier scheme" + "Water body category code") has to be available in the table MonitoringSites in the WISE-SoE_WaterQuality_SpatialObjects reporting obligation.

The field "Determinand code for biology data (Impact type specific BQE)" is unique specification of the determinand.

If it is not possible to report only one national EQR value for a determinand (BQE and impact type) (e.g. if there is more than one index), then it is recommended to instead combine the indices and report the normalised EQR value for the BQE and impact type.

If it is not possible to report neither national EQR nor normalised EQR values, then it is still possible to report only the status class. However, these data may not be used in all assessments (e.g. time series analyses).

Classification systems for the different national EQRs can depend on water body type, therefore the field "Water body type in the National Classification System" should always be filled in. Intercalibration water body types are preferred, but in cases where this is not possible, other national water body types can be reported instead. (Where possible, intercalibration water body types should also be reported in the field "Water body type code in the WFD Intercalibration System" in this table.)

If the classification system is identical for all waterbody types, please fill in "general" as the value in the field "Water body type in the National Classification System".

The "Water body type in the National Classification System" reported in this table must be identical with "Water body type in the National Classification System" reported in the table BiologyEQRClassificationProcedure.

Columns in **Annual biology EQR data by monitoring site table**:

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	Column name	Column definition	Methodology	Data specifications
3.4.1	Monitoring Site Identifier (monitoringSiteIdentifier)	<p>Unique international identifier of the water quality / water quantity monitoring site in which data are sampled.</p> <p>If the site was reported as WFD Art.8 monitoring site, enter the WFD identifier of the site (EUSWMonitoringSiteCode for rivers and lakes monitoring sites, EUGWMonitoringSiteCode for groundwater monitoring sites)</p> <p>If the site was not reported as WFD Art.8 monitoring site, enter the EIONET international identifier of the site.</p>	<p>This is a required, not null field.</p> <p>Monitoring Site Identifier is unique value in the list of monitoring sites for specific Water body category value.</p> <p>First 2 characters must be the Member State's 2-alpha character ISO country code (Greece = 'EL'. United Kingdom = 'UK').</p> <p>National characters can not be used.</p> <p>Creation of the EIONET international identifier for rivers and lakes monitoring sites: enter National station ID if the Member State's 2-alpha character ISO country code is used as first 2 characters in this code, otherwise add country code as the prefix to the NationalSiteID. Example: country: Austria, NationalStationID: ST_123 => MonitoringSiteID: ATST_123</p> <p>For groundwater monitoring sites, use the international identifier of the groundwater monitoring site (former element Station_ID).</p>	Datatype: string Minimum size: 3 Maximum size: 42
3.4.2	Monitoring site identifier scheme (monitoringSiteIdentifierScheme)	Specification, whether ID of the monitoring site is WFD identifier or EIONET identifier.	This is a required, not null field.	string codelist: see section 4
3.4.3	Water body category code (parameterWaterBodyCategory)	Water body category code, as defined in the codelist.	This is a required, not null field.	string codelist: see section 4

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Dataset specification for WISE-SoE reporting: Water Quality - Content Data * Version June 2015 * created 26/06/2015

Column name	Column definition	Methodology	Data specifications
3.4.4	Water body type in the National Classification System (parameterNCSWaterBodyType)	Type of waterbody as defined by the member state.	This is a required, not null field. Datatype: string Minimum size: 1 Maximum size: 50
3.4.5	Water body type code in the WFD Intercalibration System (parameterWFDIntercalibrationWaterBodyType)	Type of waterbody as defined by the WFD Intercalibration process	This is a required, not null field for surface water bodies in which biological data elements are monitored. Allowed values: see codelist
3.4.6	Reference period (year) (phenomenonTimeReferencePeriod)	Year of aggregation period for aggregated data sets in format YYYY.	This is a required, not null field. Year should be no later than that requested in the latest data request. Datatype: integer Maximum size: 4 Minimum inclusive value: 1800 Maximum inclusive value: 2014
3.4.7	Sampling period (parameterSamplingPeriod)	The period within one year during which the input data used for aggregation were sampled	Use the format YYYY-MM-DD--YYYY-MM-DD or YYYY-MM--YYYY-MM (if the days are not exactly known or are not significant). If the the input data have been sampled during the entire year or are representative for the entire year, fill YYYY-01-01--YYYY-12-31
3.4.8	Determinand code for biology data (Impact-specific BQE) (observedPropertyDeterminandBiologyEQRCode)	Impact-specific determinand name for biological metrics, as defined in the codelist.	This is a required, not null field. The codelist contains all determinands relating to biological metrics. The determinand name must be unique for each record reported per station and year, and must therefore be both BQE-specific and impact-specific (because different EQR values based on the same BQE may be reported for different impacts).
3.4.9	Ecological status class of determinand (resultEcologicalStatusClassValue)	Ecological status class (or ecological potential class, for artificial and heavily modified water bodies), for the given biological determinand.	This is a required, not null field. For rivers and lakes, the ecological status (or potential) class should be calculated for the given biological quality element, impact type and monitoring station. string codelist: see section 4

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Dataset specification for WISE-SoE reporting: Water Quality - Content Data * Version June 2015 * created 26/06/2015

	Column name	Column definition	Methodology	Data specifications
3.4.10	Number of Samples (resultNumberOfSamples)	Number of samples included in aggregated data.	This is a required, not null field.	Datatype: integer Maximum size: 4 Minimum inclusive value: 1
3.4.11	Ecological quality ratio value (resultEQRValue)	Mean value of metric converted to national EQR scale (Ecological Quality Ratio)	EQR is usually calculated as metric value divided by reference value, but different methods are used depending on the metric and the country.	Datatype: float Minimum inclusive value: 0
3.4.12	Normalised ecological quality ratio value (resultNormalisedEQRValue)	Mean value of metric converted to normalised EQR scale (Ecological Quality Ratio).	For calculation of Normalised EQR, see illustration http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/wise_reporting_2011/biological_reporting/biologydd_20110617.jpg	Datatype: float Minimum inclusive value: 0 Maximum inclusive value: 1
3.4.13	Remarks (Remarks)	Remarks, comments or explanatory notes (free text).	Rivers, Lakes, Groundwater quality - content data tables: Enter the text "value confirmed" into the Remarks field in the case you are sure the value exceeding the Potentially high value is correct. Lists of these high values for selected substances are available on the Forum folder: http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/wise-soe-reporting-2015/codelists-substances-water-quality-reporting	Datatype: string Minimum size: 0 Maximum size: 255

3.5 Procedure for the classification of status from biology EQR data table

Short name BiologyEQRClassificationProcedure

Definition Information on national classification system for each biological determinand and waterbody type, including boundaries of ecological status classes (and ecological potential classes, for artificial and / or heavily modified waterbodies).

This table is valid for rivers and lakes biological data only.

Short Description Classification system for ecological status classes in rivers and lakes

Methodology for obtaining data Classification system (class boundaries) should be reported at the national EQRs (Ecological Quality Ratio; normally between 0 and 1).

Unique record in this table is created by combination of the fields "Country code", "Water body category code", "Determinand code for biology data (Impact-specific BQE)" and "Water body type in the National Classification System".

Please see illustration "Reporting of biological metric values and class boundaries in EQR scale" for more explanation:

http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/wise_reporting_2011/biological_reporting/biologydd_20110617jpg

For artificial waterbodies and highly modified waterbodies, the information given on class boundaries will represent ecological potential instead of ecological status. Classification systems for the different national EQRs can depend on waterbody type - therefore the field "Water body type in the National Classification System" should always be filled in. Intercalibration waterbody types are preferred, but in cases where this is not possible, other national waterbody types can be reported instead. Only one waterbody type can be reported per BQE in one row. For each waterbody type, please use a new row and repeat the full information on classification systems for each BQE and impact type.

If the classification system is identical for all waterbody types, please fill in "general" as "Water body type in the National Classification System".

The information in "Water body type in the National Classification System" must be consistent with what is reported in the table BiologyEQRData.

Columns in Procedure for the classification of status from biology EQR data table:

	Column name	Column definition	Methodology	Data specifications
3.5.1	Country Code (CountryCode)	Abbreviation of EEA Member or Collaborating Country, as defined in the codelist.	This is a required, not null field. ISO 3166-alpha-2 code elements.	string codelist: see section 4

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Column name	Column definition	Methodology	Data specifications	
3.5.2	Determinand code for biology data (Impact-specific BQE) (observedPropertyDeterminandBiologyEQRCode)	Impact-specific determinand name for biological metrics, as defined in the codelist.	This is a required, not null field. The codelist contains all determinands relating to biological metrics. The determinand name must be unique for each record reported per station and year, and must therefore be both BQE-specific and impact-specific (because different EQR values based on the same BQE may be reported for different impacts).	string codelist: see section 4
3.5.3	Water body category code (parameterWaterBodyCategory)	Water body category code, as defined in the codelist.	This is a required, not null field.	string codelist: see section 4
3.5.4	Water body type in the National Classification System (parameterNCSWaterBodyType)	Type of waterbody as defined by the member state.	This is a required, not null field.	Datatype: string Minimum size: 1 Maximum size: 50
3.5.5	Natural, artificial or heavily modified water body (parameterNaturalAWBHMWB)	Specification of whether a water body is identified as natural, artificial (AWB) or heavily modified (HMWB). AWBs are surface water bodies which have been created in a location where no water body existed before and which have not been created by the direct physical alteration, movement or realignment of an existing water body. HMWB are bodies of water which as a result of physical alterations by human activity are substantially changed in character and cannot, therefore, meet "good ecological status" (GES). In this context physical alterations mean changes to e.g. the size, slope, discharge, form and shape of river bed of a water body.		string codelist: see section 4
3.5.6	Boundary value between High and Good ecological status or potential classes (parameterBoundaryValueClasses12)	Boundary between High and Good ecological status or potential classes, for a given biological determinand and waterbody type.	This is a required, not null field. The class boundary should be given at the scale of the national EQR (between 0 and 1).	Datatype: float Minimum inclusive value: 0

Data Dictionary

Dataset specification for WISE-SoE reporting: Water Quality - Content Data * Version June 2015 * created 26/06/2015

Column name	Column definition	Methodology	Data specifications	
3.5.7	Boundary value between Good and Moderate ecological status or potential classes (parameterBoundaryValueClasses23)	Boundary between Good and Moderate ecological status or potential classes, for a given biological determinand and waterbody type.	This is a required, not null field. The class boundary should be given at the scale of the national EQR (between 0 and 1).	Datatype: float Minimum inclusive value: 0
3.5.8	Boundary value between Moderate and Poor ecological status or potential classes (parameterBoundaryValueClasses34)	Boundary between Moderate and Poor ecological status or potential classes, for a given biological determinand and waterbody type.	This is a required, not null field. The class boundary should be given at the scale of the national EQR (between 0 and 1).	Datatype: float Minimum inclusive value: 0
3.5.9	Boundary value between Poor and Bad ecological status or potential classes (parameterBoundaryValueClasses45)	Boundary between Poor and Bad ecological status or potential classes, for a given biological determinand and waterbody type.	This is a required, not null field. The class boundary should be given at the scale of the national EQR (between 0 and 1).	Datatype: float Minimum inclusive value: 0
3.5.10	Intercalibration status of the biological quality element (parameterICStatusOfDeterminandBiologyEQR)	Has the biological determinand been intercalibrated?	This is a required, not null field.	boolean codelist: see section 4
3.5.11	Remarks (Remarks)	Remarks, comments or explanatory notes (free text).	Rivers, Lakes, Groundwater quality - content data tables: Enter the text "value confirmed" into the Remarks field in the case you are sure the value exceeding the Potentially high value is correct. Lists of these high values for selected substances are available on the Forum folder: http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/wise-soe-reporting-2015/codlists-substances-water-quality-reporting	Datatype: string Minimum size: 0 Maximum size: 255

4. Codelists

4.1 Common Elements Codelists

4.1.1 Country Code (Released at 28 Feb 2013)

4.1.1.1 Codelist

Value	Definition	Short Description
AL	Albania	
AT	Austria	
BA	Bosnia and Herzegovina	
BE	Belgium	
BG	Bulgaria	
CH	Switzerland	
CY	Cyprus	
CZ	Czech Republic	
DE	Germany	
DK	Denmark	
DZ	Algeria	
EE	Estonia	
EG	Egypt	
ES	Spain	
FI	Finland	
FR	France	
GB	United Kingdom	
GR	Greece	
HR	Croatia	
HU	Hungary	
IE	Ireland	
IL	Israel	
IS	Iceland	
IT	Italy	
JO	Jordan	
LB	Lebanon	
LI	Liechtenstein	
LT	Lithuania	
LU	Luxembourg	
LV	Latvia	
MA	Morocco	
ME	Montenegro	
MK	Macedonia, the Former Yugoslav Republic of	
MT	Malta	
NL	Netherlands	
NO	Norway	
PL	Poland	
PS	Palestine, State of	Palestine

Value	Definition	Short Description
PT	Portugal	
RO	Romania	
RS	Serbia	
SE	Sweden	
SI	Slovenia	
SK	Slovakia	
TN	Tunisia	
TR	Turkey	
XK	Kosovo (UNSCR 1244/99)	is not official ISO 3166-alpha-2 code

4.1.1.2 Referencing Tables

Table Name
Procedure for the classification of status from biology EQR data

4.1.2 Intercalibration status of the biological quality element (Released at 24 Jun 2015)

4.1.2.1 Codelist

Value	Definition	Short Description
false	Value auto-created by DD	Auto-created by DD
true	Value auto-created by DD	Auto-created by DD

4.1.2.2 Referencing Tables

Table Name
Procedure for the classification of status from biology EQR data

4.1.3 Natural, artificial or heavily modified water body (Released at 26 Jun 2015)

4.1.3.1 Codelist

Value	Definition	Short Description
AWB	Artificial water body	
HMWB	Heavily modified water body	
Natural	Natural water body	

4.1.3.2 Referencing Tables

Table Name
Procedure for the classification of status from biology EQR data

4.1.4 Water body category code (Released at 09 Jun 2015)

4.1.4.1 Codelist

Value	Definition	Short Description
CW	Coastal waters	
GW	Groundwater	
LW	Lakes	
RW	Rivers	
TW	Transitional waters	

4.1.4.2 Referencing Tables

Table Name
Sample data by monitoring site
Annual sample statistics by monitoring site
Annual sample statistics by water body
Annual biology EQR data by monitoring site
Procedure for the classification of status from biology EQR data

4.1.5 Ecological status class of determinand (Released at 26 Jun 2015)

4.1.5.1 Codelist

Value	Definition	Short Description
B	Bad ecological status, as defined by the WFD	
G	Good ecological status, as defined by the WFD	
GEP	Good ecological potential (for artificial and heavily modified waterbodies), as defined by the WFD	
H	High ecological status, as defined by the WFD	
M	Moderate ecological status, as defined by the WFD	
MaxEP	Maximum ecological potential (for artificial and heavily modified waterbodies)	
MPB	Moderate, poor or bad status or potential (to be used in cases where more exact classification is not available)	
P	Poor ecological status, as defined by the WFD	

4.1.5.2 Referencing Tables

Table Name
Annual biology EQR data by monitoring site

4.1.6 Determinand code for biology data (Impact-specific BQE) (Released at 26 Jun 2015)

4.1.6.1 Codelist

Value	Definition	Short Description
AngiospermsEQ R	Ecological Quality Ratio for national angiosperms metric used as indicator of the pressure	TC waters only.
InvertebrateEQR	Ecological Quality Ratio for national invertebrate metric used as indicator of the pressure	TC waters only.
InvertebrateEQR _A	Ecological Quality Ratio for national invertebrate metric used as indicator of the pressure Acidification.	Rivers only.
InvertebrateEQR _E	Ecological Quality Ratio for national invertebrate metric used as indicator of the pressure Eutrophication.	Rivers only.
InvertebrateEQR _G	Ecological Quality Ratio for national invertebrate metric used as indicator of the pressure General degradation.	Rivers only.
InvertebrateEQR _H	Ecological Quality Ratio for national invertebrate metric used as indicator of the pressure Hydromorphology.	Rivers only.
MacroalgaeEQR	Ecological Quality Ratio for national macroalgae metric used as indicator of the pressure	TC waters only.
MacrophyteEQR _A	Ecological Quality Ratio for national macrophyte metric used as indicator of the pressure Acidification.	Lakes only.
MacrophyteEQR _E	Ecological Quality Ratio for national macrophyte metric used as indicator of the pressure Eutrophication.	Lakes only.
MacrophyteEQR _G	Ecological Quality Ratio for national macrophyte metric used as indicator of the pressure General degradation.	Lakes only.
MacrophyteEQR _H	Ecological Quality Ratio for national macrophyte metric used as indicator of the pressure Hydromorphology.	Lakes only.
PhytobenthosEQ R_A	Ecological Quality Ratio for national phytobenthos metric used as indicator of the pressure Acidification.	Rivers only.
PhytobenthosEQ R_E	Ecological Quality Ratio for national phytobenthos metric used as indicator of the pressure Eutrophication.	Rivers only.
PhytobenthosEQ R_G	Ecological Quality Ratio for national phytobenthos metric used as indicator of the pressure General degradation.	Rivers only.
PhytobenthosEQ R_H	Ecological Quality Ratio for national phytobenthos metric used as indicator of the pressure Hydromorphology.	Rivers only.
PhytoplanktonB oomsEQR	Ecological Quality Ratio for national phytoplankton blooms metric used as indicator of the pressure	TC waters only.
PhytoplanktonE QR_A	Ecological Quality Ratio for national phytoplankton metric used as indicator of the pressure Acidification.	Lakes only.

Value	Definition	Short Description
PhytoplanktonE QR_E	Ecological Quality Ratio for national phytoplankton metric used as indicator of the pressure Eutrophication.	Lakes only.
PhytoplanktonE QR_G	Ecological Quality Ratio for national phytoplankton metric used as indicator of the pressure General degradation.	Lakes only.
PhytoplanktonE QR_H	Ecological Quality Ratio for national phytoplankton metric used as indicator of the pressure Hydromorphology.	Lakes only.

4.1.6.2 Referencing Tables

Table Name
Annual biology EQR data by monitoring site
Procedure for the classification of status from biology EQR data

4.1.7 Water body type code in the WFD Intercalibration System (Released at 24 Jun 2015)

4.1.7.1 Codelist

Value	Definition	Short Description
L-A1	Lowland, shallow, calcareous, small	
L-A2	Lowland, shallow, calcareous, large	
L-A3	Lowland, shallow, peat, small	
L-AL3	Lowland or mid-altitude, deep, moderate to high alkalinity (alpine influence), large	
L-AL4	Mid-altitude, shallow, moderate to high alkalinity (alpine influence), large	
L-CB1	Lowland, shallow, stratified, calcareous	
L-CB2	Lowland, very shallow, calcareous	
L-CB3	Lowland, shallow, siliceous, vegetation dominated by lobelia	
L-M1	Lowland, shallow, calcareous, large	
L-M5	Reservoirs, deep, large, siliceous, low altitude	
L-M7	Reservoirs, deep, large, siliceous, mid-altitude	
L-M8	Reservoirs, deep, large, calcareous, between low and highland	
L-N1	Lowland, shallow, mod alk, clear	
L-N10	polyhumic, low to moderate alk, shallow, small or medium size, lowland and mid-altitude	
L-N11	polyhumic, low alk, very shallow, lowland	
L-N2a	Lowland, shallow, siliceous, low alkalinity, large	
L-N2b	Lowland, deep, siliceous, low alkalinity, large	
L-N3a	Lowland, shallow, humic, low alk.	
L-N3b	Lowland, shallow, polyhumic, low alk.	
L-N5	Boreal, shallow, clear, large	
L-N6a	Mid-altitude, shallow, humic, low alk.	
L-N6b	Mid-altitude, shallow, polyhumic, low alk.	
L-N7	Highland, shallow, siliceous, low alkalinity, large	

Value	Definition	Short Description
L-N8a	Lowland, shallow, mod alk, humic	
L-N8b	Lowland, shallow, mod alk, polyhumic	
L-N9	large, deep, moderate alk., clear	
R-A1	Pre-alpine - Small to medium, high altitude calcareous	
R-A2	Alpine -Small to medium, high altitude, siliceous	
R-C1	Small lowland siliceous sand	
R-C2	Small lowland siliceous - rock	
R-C3	Small mid-altitude siliceous	
R-C4	Medium lowland mixed	
R-C5	Large lowland mixed	
R-C6	Small, lowland, calcareous	
R-E1	Carpathians: small to medium, mid-altitude	
R-E2	Plains: medium-sized, lowland	
R-E3	Plains: large and very large, lowland	
R-E4	Plains: medium-sized, mid-altitude	
R-E5	Balkans: medium-sized, mid-altitude	
R-E6	Danube River: middle and downstream	
R-M1	Small, mid altitude	
R-M2	Medium, lowland	
R-M3	Large, lowland	
R-M4	Small/Medium Mediterranean mountains	
R-M5	Small Mediterranean temporary	
R-N1	Small lowland siliceous moderate alkalinity, clear	
R-N2	Small-medium lowland siliceous low alkalinity, clear	
R-N3	Small-medium lowland siliceous low alkalinity, organic (humic)	
R-N4	Medium lowland siliceous moderate alkalinity, clear	
R-N5	Small mid-altitude siliceous low alkalinity, clear	
R-N7	Small highland siliceous low alkalinity, clear	
R-N9	Small - medium mid-altitude siliceous low alkalinity, organic (humic)	

4.1.7.2 Referencing Tables

Table Name
Annual biology EQR data by monitoring site

4.1.8 Analysed media specification (Released at 09 Jun 2015)

4.1.8.1 Codelist

Value	Definition	Short Description
Biota		
Sediment		

Value	Definition	Short Description
SPM	Suspended particular matter	
Water		

4.1.8.2 Referencing Tables

Table Name
Sample data by monitoring site
Annual sample statistics by monitoring site
Annual sample statistics by water body

4.1.9 CEN/ISO analytical method code (Released at 26 Jun 2015)

4.1.9.1 Codelist

Value	Definition	Short Description
EN 12260:2003	Water quality - Determination of nitrogen - Determination of bound nitrogen (TNb), following oxidation to nitrogen oxides	
EN 12338:1998	Water quality - Determination of mercury - Enrichment methods by amalgamation	
EN 1233:1996	Water quality - Determination of chromium - Atomic absorption spectrometric methods	
EN 12673:1998	Water quality - Gas chromatographic determination of some selected chlorophenols in water	
EN 12918:1999	Water quality - Determination of parathion, parathion-methyl and some other organophosphorus compounds in water by dichloromethane extraction and gas chromatographic analysis	
EN 13506:2001	Water quality - Determination of mercury by atomic fluorescence spectrometry	
EN 14207:2003	Water quality - Determination of epichlorohydrin	
EN 1483:2007	Water quality - Determination of mercury - Method using atomic absorption spectrometry	
EN 1484:1997	Water analysis - Guidelines for the determination of total organic carbon (TOC) and dissolved organic carbon (DOC)	
EN 14996:2006	Water quality - Guidance on assuring the quality of biological and ecological assessments in the aquatic environment	
EN 1899-1:1998	Water quality - Determination of biochemical oxygen demand after n days (BOD _n) - Part 1: Dilution and seeding method with allylthiourea addition (ISO 5815:1989, modified)	
EN 1899-2:1998	Water quality - Determination of biochemical oxygen demand after n days (BOD _n) - Part 2: Method for undiluted samples (ISO 5815:1989, modified)	
EN 25663:1993	Water quality - Determination of Kjeldahl nitrogen - Method after mineralization with selenium (ISO 5663:1984)	
EN 25813:1992	Water quality - Determination of dissolved oxygen - Iodometric method (ISO 5813:1983)	

Value	Definition	Short Description
EN 25814:1992	Water quality - Determination of dissolved oxygen - Electrochemical probe method (ISO 5814:1990)	
EN 26595:1992	Water quality - Determination of total arsenic - Silver diethyldithiocarbamate spectrophotometric method (ISO 6595:1982)	
EN 26595:1992/AC:1992	Water quality - Determination of total arsenic - Silver diethyldithiocarbamate spectrophotometric method (ISO 6595:1982)	
EN 26777:1993	Water quality - Determination of nitrite - Molecular nitrite absorption spectrometric method (ISO 6777:1984)	
EN 27888:1993	Water quality - Determination of electrical conductivity (ISO 7888:1985)	
EN 872:2005	Water quality - Determination of suspended solids - Method by filtration through glass fibre filters	
EN ISO 10301:1997	Water quality - Determination of highly volatile halogenated hydrocarbons - Gas-chromatographic methods (ISO 10301:1997)	
EN ISO 10304-1:1995	Water quality - Determination of dissolved fluoride, chloride, nitrite, orthophosphate, bromide, nitrate and sulfate ions, using liquid chromatography of ions - Part 1: Method for water with low contamination (ISO 10304-1:1992)	
EN ISO 10304-2:1996	Water quality - Determination of dissolved anions by liquid chromatography of ions - Part 2: Determination of bromide, chloride, nitrate, nitrite, orthophosphate and sulfate in waste water (ISO 10304-2:1995)	
EN ISO 10304-3:1997	Water quality - Determination of dissolved anions by liquid chromatography of ions - Part 3: Determination of chromate, iodide, sulfite, thiocyanate and thiosulfate (ISO 10304-3:1997)	
EN ISO 10304-4:1999	Water quality - Determination of dissolved anions by liquid chromatography of ions - Part 4: Determination of chlorate, chloride and chlorite in water with low contamination (ISO 10304-4:1997)	
EN ISO 10695:2000	Water quality - Determination of selected organic nitrogen and phosphorus compounds - Gas chromatographic methods (ISO 10695:2000)	
EN ISO 11732:2005	Water quality - Determination of ammonium nitrogen - Method by flow analysis (CFA and FIA) and spectrometric detection (ISO 11732:2005)	
EN ISO 11885:1997	Water quality - Determination of 33 elements by inductively coupled plasma atomic emission spectroscopy (ISO 11885:1996)	
EN ISO 11905-1:1998	Water quality - Determination of nitrogen - Part 1: Method using oxidative digestion with peroxodisulfate (ISO 11905-1:1997)	
EN ISO 11969:1996	Water quality - Determination of arsenic - Atomic absorption spectrometric method (hydride technique) (ISO 11969:1996)	
EN ISO 12020:2000	Water quality - Determination of aluminium - Atomic absorption spectrometric methods (ISO 12020:1997)	

Data Dictionary

Dataset specification for WISE-SoE reporting: Water Quality - Content Data * Version June 2015 * created 26/06/2015

Value	Definition	Short Description
EN ISO 13395:1996	Water quality - Determination of nitrite nitrogen and nitrate nitrogen and the sum of both by flow analysis (CFA and FIA) and spectrometric detection (ISO 13395:1996)	
EN ISO 14402:1999	Water quality - Determination of phenol index by flow analysis (FIA and CFA)(ISO 14402:1999)	
EN ISO 14403:2002	Water quality - Determination of total cyanide and free cyanide by continuous flow analysis (ISO 14403:2002)	
EN ISO 14911:1999	Water quality - Determination of dissolved Li+, Na+, NH4+, K+, Mn2+, Ca2+, Mg2+, Sr2+ and Ba2+ using ion chromatography - Method for water and waste water (ISO 14911:1998)	
EN ISO 15061:2001	Water quality - Determination of dissolved bromate - Method by liquid chromatography of ions (ISO 15061:2001)	
EN ISO 15586:2003	Water quality - Determination of trace elements using atomic absorption spectrometry with graphite furnace (ISO 15586:2003)	
EN ISO 15680:2003	Water quality - Gas-chromatographic determination of a number of monocyclic aromatic hydrocarbons, naphthalene and several chlorinated compounds using purge-and-trap and thermal desorption (ISO 15680:2003)	
EN ISO 15681-1:2004	Water quality - Determination of orthophosphate and total phosphorus contents by flow analysis (FIA and CFA) - Part 1: Method by flow injection analysis (FIA) (ISO 15681-1:2003)	
EN ISO 15681-2:2004	Water quality - Determination of orthophosphate and total phosphorus contents by flow analysis (FIA and CFA) - Part 2: Method by continuous flow analysis (CFA) (ISO 15681-2:2003)	
EN ISO 15682:2001	Water quality - Determination of chloride by flow analysis (CFA and FIA) and photometric or potentiometric detection (ISO 15682:2000)	
EN ISO 15913:2003	Water quality - Determination of selected phenoxyalkanoic herbicides, including bentazones and hydroxybenzotrioles by gas chromatography and mass spectrometry after solid phase extraction and derivatization (ISO 15913:2000)	
EN ISO 17294-1:2006	Water quality - Application of inductively coupled plasma mass spectrometry (ICP-MS) - Part 1: General guidelines (ISO 17294-1:2004)	
EN ISO 17294-2:2004	Water quality - Application of inductively coupled plasma mass spectrometry (ICP-MS) - Part 2: Determination of 62 elements (ISO 17294-2:2003)	
EN ISO 17353:2005	Water quality - Determination of selected organotin compounds - Gas chromatographic method (ISO 17353:2004)	
EN ISO 17495:2003	Water quality - Determination of selected nitrophenols - Method by solid-phase extraction and gas chromatography with mass spectrometric detection (ISO 17495:2001)	

Value	Definition	Short Description
EN ISO 17993:2003	Water quality - Determination of 15 polycyclic aromatic hydrocarbons (PAH) in water by HPLC with fluorescence detection after liquid-liquid extraction (ISO 17993:2002)	
EN ISO 18412:2006	Water quality - Determination of chromium(VI) - Photometric method for weakly contaminated water (ISO 18412:2005)	
EN ISO 18856:2005	Water quality - Determination of selected phthalates using gas chromatography/mass spectrometry (ISO 18856:2004)	
EN ISO 18857-1:2006	Water quality - Determination of selected alkylphenols - Part 1: Method for non-filtered samples using liquid-liquid extraction and gas chromatography with mass selective detection (ISO 18857-1:2005)	
EN ISO 23631:2006	Water quality - Determination of dalapon, trichloroacetic acid and selected haloacetic acids - Method using gas chromatography (GC-ECD and/or GC-MS detection) after liquid-liquid extraction and derivatization (ISO 23631:2006)	
EN ISO 23631:2006/AC:2007	Water quality - Determination of dalapon, trichloroacetic acid and selected haloacetic acids - Method using gas chromatography (GC-ECD and/or GC-MS detection) after liquid-liquid extraction and derivatization (ISO 23631:2006)	
EN ISO 5667-1:2006	Water quality - Sampling - Part 1: Guidance on the design of sampling programmes and sampling techniques (ISO 5667-1:2006)	
EN ISO 5667-1:2006/AC:2007	Water quality - Sampling - Part 1: Guidance on the design of sampling programmes and sampling techniques (ISO 5667-1:2006)	
EN ISO 5667-3:2003	Water quality - Sampling - Part 3: Guidance on the preservation and handling of water samples (ISO 5667-3:2003)	
EN ISO 5961:1995	Water quality - Determination of cadmium by atomic absorption spectrometry (ISO 5961:1994)	
EN ISO 6468:1996	Water quality - Determination of certain organochlorine insecticides, polychlorinated biphenyls and chlorobenzenes - Gas chromatographic method after liquid-liquid extraction (ISO 6468:1996)	
EN ISO 6878:2004	Water quality - Determination of phosphorus - Ammonium molybdate spectrometric method (ISO 6878:2004)	
EN ISO 7027:1999	Water quality - Determination of turbidity (ISO 7027:1999)	
EN ISO 7887:1994	Water quality - Examination and determination of colour (ISO 7887:1994)	
EN ISO 7980:2000	Water quality - Determination of calcium and magnesium - Atomic absorption spectrometric method (ISO 7980:1986)	
EN ISO 9377-2:2000	Water quality - Determination of hydrocarbon oil index - Part 2: Method using solvent extraction and gas chromatography (ISO 9377-2:2000)	
EN ISO 9562:2004	Water quality - Determination of adsorbable organically bound halogens (AOX) (ISO 9562:2004)	
EN ISO 9963-1:1995	Water quality - Determination of alkalinity - Part 1: Determination of total and composite alkalinity (ISO 9963-1:1994)	

Value	Definition	Short Description
EN ISO 9963-2:1995	Water quality - Determination of alkalinity - Part 2: Determination of carbonate alkalinity (ISO 9963-2:1994)	
Other analytical method	Please describe the method in the field Remarks	

4.1.9.2 Referencing Tables

Table Name
Sample data by monitoring site
Annual sample statistics by monitoring site

4.1.10 Unit of measure (Released at 24 Jun 2015)

4.1.10.1 Codelist

Value	Definition	Short Description
m		
mg/l		
presence	Values 0 (absence) or 1 (presence).	
proportion	Proportion cyanobacteria biomass of the total phytoplankton biomass (excluding Chroococcales, but including Microcystis and Woronichinia). Range: 0 - 1.	
ratio		
°C		
µg/l		
µS/cm		

4.1.10.2 Referencing Tables

Table Name
Sample data by monitoring site
Annual sample statistics by monitoring site
Annual sample statistics by water body

4.1.11 Observed value below LOQ (Released at 24 Jun 2015)

4.1.11.1 Codelist

Value	Definition	Short Description
false	Value auto-created by DD	Auto-created by DD
true	Value auto-created by DD	Auto-created by DD

4.1.11.2 Referencing Tables

Table Name
Sample data by monitoring site

4.1.12 Analysed fraction code (Released at 26 Jun 2015)

4.1.12.1 Codelist

Value	Definition	Short Description
dissolved	dissolved (filtered) water sample	
total	total (unfiltered) water sample	

4.1.12.2 Referencing Tables

Table Name
Sample data by monitoring site
Annual sample statistics by monitoring site
Annual sample statistics by water body

4.1.13 Mean value below LOQ (Released at 23 Jun 2015)

4.1.13.1 Codelist

Value	Definition	Short Description
false	Value auto-created by DD	Auto-created by DD
true	Value auto-created by DD	Auto-created by DD

4.1.13.2 Referencing Tables

Table Name
Annual sample statistics by monitoring site
Annual sample statistics by water body

4.1.14 Water body identifier scheme (Released at 26 Jun 2015)

4.1.14.1 Codelist

Value	Definition	Short Description
eionetGroundwaterBodyCode	EIONET identifier of the Groundwater Body	
eionetSurfaceWaterBodyCode	EIONET identifier of the Surface Water Body	
euGroundwaterBodyCode	WFD identifier of the Groundwater Body	

Value	Definition	Short Description
euSurfaceWaterBodyCode	WFD identifier of the Surface Water Body	

4.1.14.2 Referencing Tables

Table Name
Annual sample statistics by water body

4.1.15 Minimum value below LOQ (Released at 23 Jun 2015)

4.1.15.1 Codelist

Value	Definition	Short Description
false	Value auto-created by DD	Auto-created by DD
true	Value auto-created by DD	Auto-created by DD

4.1.15.2 Referencing Tables

Table Name
Annual sample statistics by monitoring site
Annual sample statistics by water body

4.1.16 Determinand Code (Released at 24 Jun 2015)

4.1.16.1 Codelist

Value	Definition	Short Description
CAS_1912-24-9	Atrazine	[µg/l] !!! Example of codelist filled only
CAS_7440-70-2	Calcium	[mg/l]
EEA_10-10-6	Total Nitrogen	[mg/l]

4.1.16.2 Referencing Tables

Table Name
Sample data by monitoring site
Annual sample statistics by monitoring site
Annual sample statistics by water body

4.1.17 Maximum value below LOQ (Released at 23 Jun 2015)

4.1.17.1 Codelist

Value	Definition	Short Description
false	Value auto-created by DD	Auto-created by DD
true	Value auto-created by DD	Auto-created by DD

4.1.17.2 Referencing Tables

Table Name
Annual sample statistics by monitoring site
Annual sample statistics by water body

4.1.18 Median value below LOQ (Released at 23 Jun 2015)

4.1.18.1 Codelist

Value	Definition	Short Description
false	Value auto-created by DD	Auto-created by DD
true	Value auto-created by DD	Auto-created by DD

4.1.18.2 Referencing Tables

Table Name
Annual sample statistics by monitoring site
Annual sample statistics by water body

4.1.19 Monitoring site identifier scheme (Released at 26 Jun 2015)

4.1.19.1 Codelist

Value	Definition	Short Description
eionetMonitoringSiteCode	EIONET identifier	
euMonitoringSiteCode	WFD identifier	

4.1.19.2 Referencing Tables

Table Name
Sample data by monitoring site
Annual sample statistics by monitoring site
Annual biology EQR data by monitoring site