



Issues Paper on monitoring and assessment under the 2006 Bathing Water Directive.

**Bathing Water Committee Meeting
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Update

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This document has been submitted to the Bathing Water Committee that took place the 28th September 2012 for discussion. Some changes had been introduced afterwards, as a result of the discussion.

Members of the Committee are invited to take note and present any observation they may consider relevant.

This document presents issues raised by Member States reporting under the EU Bathing Water Directive 2006/7/EC (hereinafter referred also as the Directive) for the 2011 bathing season. It aims to identify some problems encountered in the process of assessment, to clarify open questions or confirm existing understandings as well as to present the position adopted by the European Commission and the European Environment Agency to overcome the difficulties found in the process.

For the 2011 season, bathing water quality has been assessed under the Directive in 16 European countries. This is 13 more than for the 2010 bathing season. Three countries, the Czech Republic, Romania and the United Kingdom have been assessed under the old Bathing Water Directive 76/160/EEC. Eleven countries have been assessed under the transition period rules. Reporting under the new directive will become obligatory in 2012.

This document does not represent the official views of the European Commission.

The technical rules for the analysis of reported information and data developed in past years are still subject to further elaboration. In any event, it has to be reminded that only the Court of Justice of the European Union can provide a definitive interpretation to the legal provisions in the Directive.

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1 Data sets

1.1 *New bathing water/changes to affect the classification*

- 1) *How long bathing waters can be classified as ‘new’ or ‘changes’? When a newly identified bathing water or a bathing water with changes can be assessed (classified into quality class) under the Directive 2006/7/EC? How to assess a newly identified bathing water or bathing water with changes if the number of samples is sufficient, but other frequency criteria (e.g. interval) are not satisfied? How to assess bathing water with changes if the number of samples in the year when changes occur is not sufficient (less than four)?*

Quality assessment may be carried out when both the necessary data sets and the requested number of samples are available. The fact that a bathing water is newly identified or had changes affects the number of data sets to be used and the number of samples.

In strict terms (i.e. based on the literal reading of the Directive), the assessment could be carried out with data from less than four bathing seasons (i.e. one, two or three) for the bathing waters that are (a) newly identified or (b) that have experienced changes affecting (or likely to affect) their classification.

Again in strict terms, the data set for newly identified waters should include at least (i) 16 samples (Art. 4.3) or (ii) 8 samples (in the case of a bathing season of 8 weeks or less (second indent of Art. 4.4)) or less if conditions in Annex IV apply.

If the necessary data sets requested were not available for a newly identified bathing water, or the number of samples was not sufficient, then the water should be classified as insufficiently sampled. In practice, such bathing water is classified as ‘new’. It keeps such status for three years at most since its classification, provided that the necessary data set is not yet available. After three years it is classified as insufficiently sampled if the same conditions persist.

As regards the case when changes occur that might affect the classification of the site (Article 4.4.c). Again in strict terms, there are no conditions as regards the number of data sets or samples for the classification. Existing data are to be used as much as they are available from the time where the changes occurred. It has to be reminded nevertheless that this is only possible when the changes are to affect or likely to affect the classification of the bathing site concerned. Such information should therefore be provided. Attribute “ManMeas” of Seasonal information on bathing waters table can be used for that purpose.

The Commission intends to ensure the application of the strict terms of the Directive progressively. In practice, these situations are dealt with at present in a way that facilitates the assessment.

A bathing water initially considered new (i.e. getting class ‘new’ (attr. BWType is ‘2’, Inventory of identified bathing waters table) or ‘changes’ (attr. Changes is ‘Y’, Seasonal information on bathing waters table)) will keep such status, for three years at most since its classification, provided that the necessary data set is not yet available.

If the newly identified bathing water is affected by changes in a next season, the present practice is to keep the class ‘new’ or to get the class ‘changes.’ If a bathing water is af-

ected by changes in a next season(s) in a way that a quality parameters data set is not homogenous anymore, it gets class 'changes' and keeps this class until a necessary data set is available.

If changes occur in the latest year, MS should fill the attribute "Changes" with 'Y' and the attribute "NuSeasons" with '1' (Seasonal information on bathing waters table). If changes occurred already in previous year(s) but were not reported, MS should fill the attribute "Changes" with 'Y' and under the attribute "NuSeasons" the number of years (higher than 1) elapsed after that changes occurred (e.g. '2' if changes occurred in the previous year, '3' if changes occurred two years before).

- 2) *When MS have finished the "transition period", should all identified bathing waters be assessed under the new bathing water directive or could the majority of bathing waters be assessed under the new bathing water directive (bathing waters with at least 16 samples in four years) and remaining bathing waters (with < 16 samples, 'new identified' or 'with changes') be assessed under the old bathing water directive ("mix" assessment)?*

Mixed assessments are possible. Since the assessment is made for each bathing water, there may be countries where the assessment is made according to the old system for some waters and according to the new (if conditions allow) for some other. But any bathing water that was already assessed according to the new Directive, has to continue being assessed under the new Directive. Coming back is not possible.

2 Sampling

2.1 Sampling frequency rules

1) Will two assessments (*strict and less strict rules*) be applied also for the 2012 season?

Two frequency criteria in 2011 and 2012 (for 2010 and 2011 bathing season) have been applied, assuming that some countries needed further adaptation of their monitoring programmes. For data regarding the 2012 bathing season the Commission intends to apply only strict rules.

Frequency rules for the 2011 season and rules for the 2012 season

Rule	2011	2012
Pre-season sample	-one pre-season sample -the first sample could be taken shortly after the start of the season (but within 10 days after the start)	one pre-season sample
Samples after the end of the season	excluded	excluded, except for replaced sample taken after the short-term pollution
Number of samples	-at least 4 samples per year (<i>strict rules</i>) -at least 4 samples per year (2011), at least 3 samples per year (2008-2010), but at least 16 samples in 4 years (<i>less strict rules</i>)	at least 4 samples per year (<i>strict rules</i>)
Interval	-36 days (35 between samples: 31 days plus 4 days) (<i>strict rules</i>) -41 days (<i>less strict rules</i>)	one month between samples with four days delay allowed

2) Until how many days before the start of the season a pre-season sample should be taken?

The Directive does not specify the length of the period within which the pre-season sample should be taken. In practice, the flexibility sought by the provision “shortly before the start of each bathing season” (annex IV), has been translated into a 10 day interval, after discussion with Member States.

The Commission intends to accept the validity of samples taken before the 10 days period, but keeping the general interval between samples (i.e. maximum of 31 days between the preseason and the following sample).

3) Is pre-season sample included in the assessment?

Yes. Annex IV.1 requires that the pre-season sample is counted to ensure that the minimum number of samples per season is taken and analysed. If bathing waters are opened the whole year, a pre-season sample is not applicable.

- 4) *Can we take into account more than one sample before the start of the bathing season in the set of bathing water quality data used for evaluation?*

No. The Directive talks about "one" pre-season sample. The aim is to have a baseline value before the possible impact of large number of bathers. Taking more samples before the bathing season could be over-influential and affect the result of the assessment.

- 5) *In what circumstances are accepted exceptions to interval between samples (more than 4-day delay as allowed in monitoring calendar)?*

In some cases larger interval is permitted due to special circumstances, such as adverse weather or sea conditions and other. It is advised that MS provide the explanation of the reasons preventing sampling or the use of the samples obtained.

- 6) *Should samples with one parameter (*Escherichia coli* or intestinal enterococci) not reported be included or excluded from assessment?*

If one parameter is missing completely, a data set is "incomplete". Data sets with non-reported data may still be acceptable if sampling frequency criteria is still satisfied for both parameters.

- 7) *How to define number of samples per season if MS report more samples per day (taken from different locations of the same bathing water)?*

Although at present this practice is accepted, the Commission considers that it should not continue. A single location should be used for each bathing water within a season. A single sample should be taken every date fixed by the monitoring calendar. In practice, for the 2012 season assessment, up to two samples per day are still accepted.

2.2 Monitoring calendar

- 1) *What sampling interval in monitoring calendar is acceptable?*

The distance between the dates in the monitoring calendar cannot be larger than one month. If, for any reason, it is not possible to take the sample at the scheduled date, there is an acceptable delay of four more days (Article 3.4). The four days of flexibility are not to be cumulated: an initial delay does not move the next sampling date.

- 2) *Can extra samples collected out of monitoring calendar be used for classification (i.e. samples taken to confirm water quality and open a temporarily closed bathing water, samples taken for quality control or on the basis of warnings from citizens, etc.)?*

In principle yes, but it will depend on the nature of the samples (i.e. the reason why they were taken: no research samples should be used), and always fulfilling the requirements in the Directive. The monitoring calendar to be established for every bathing water before the start of the season is a pre-fixed plan to take samples but, on the other hand, allows some flexibility. The monitoring calendar could be adapted to new circumstances, e.g. the enlargement (for any reason) of the season.

3 Short-term pollution

3.1 *Definition of short-term pollution*

- 1) *Can an event be classified as short-term pollution if the pollution (causes) is predicted in a bathing water profile but in practice the event causes were not predicted, but the pollution can be verified only after obtaining sampling results by official calendar and consequently prohibition/advice against bathing is made?*

In the Commission's view, short-term pollution (STP) refers to microbiological contamination as a result of which the quality of the bathing water may or may not change. The "predictability" of the short term pollution events should be understood as referring to prior knowledge allowing to identify the conditions that trigger the situations (e.g. meteorological conditions) or the existing hazards (e.g. breaking of a sewer). Since the causes of these events should be clearly identifiable (e.g. storm discharging heavy rainfall), the authorities should have a contingency plan.

The fact that the profile contains indications regarding the high likelihood of an event to happen in the area in some periods of the year does not justify by itself a STP. Even if the event happens, there must be microbiological contamination to be a STP. If after the possible STP no contamination was detected, then it should not be considered a STP. If there is contamination and its causes are known (and they were: in the profile) and there is some kind of response plan by the authorities (e.g. advise against bathing), then these events may be considered STP.

Some MS explain the causes of short-term pollution events with the actions taken, while others do not.

- 2) *A particular case: in a bathing area there is waste water treatment plant outlet. In case of heavy rains spillway flood opens and the local authorities close the area for the following 48 hour, giving information to the citizens. This information on the bathing area is included in the "Profile of bathing water", in the advice to the bathers (in the place concerned), and in the report "Seasonal information". Is this management measure sufficient or a control sampling is needed?*

In case this was considered and STP event, samples could be disregarded but replaced. STP events do not interrupt the monitoring calendar. In general, temporary closure of a bathing water does not interrupt the monitoring calendar. Sampling should continue to allow assessment and (even more important) to allow ascertaining that no risk for human health remains.

- 3) *How long a short-term pollution event can last?*

The Directive specifies that such event is not normally expected to affect bathing water quality for more than approximately 72 hours. No time limit for STP (number of days) is considered at present for the assessment .

3.2 *Short-term pollution versus abnormal situation in assessment*

- 1) *How to assess those bathing waters with several STP events per season?*

The Directive does not consider the number of possible STP events per season. It specifies that samples taken during STP events may be disregarded. If this is the case, new samples to substitute the disregarded ones have to be taken. What is important is that there is a limit for the number of substituting samples that could be accepted.

The substituting samples have to be taken when the short-term pollution event is ended. Samples used to ascertain that the pollution is ended will not be part of the data sets.

The number of samples disregarded during the assessment period cannot represent more than 15 % of the total number of samples provided for in the monitoring calendars established for that period, or no more than one sample per bathing season, whichever is the greater (Article 5, Annex II).

Two examples are proposed:

- Four years data set; 16 samples in total according to the monitoring calendars.

The "15% condition rule" applies to the whole data set used for that assessment. It has to be calculated over the total amount of samples as scheduled in all monitoring calendars of the years concerned. In this case, 16 samples in four years, for instance, it would result in a value of 2.4 , i.e. 2;

Alternatively, the "1 per year rule" is to be applied to each bathing season. Following the case above, since the number of seasons is 4, then up to 4 samples could be substituted.

In the example, a total of 4 samples could be substituted. In any event, 16 samples are needed to allow the assessment. If needed be, the samples initially disregarded could be used to complete the requested number of samples or to ensure the frequency.

- Three years data set; 2 months season; weekly sampling; 36 samples in total according to the monitoring calendars.

In a bathing water, three STP events took place in two different years. 7 samples were disregarded. The "15% rule" results in 5 substituting samples (5.4) considered acceptable. The "1 per year rule" results in a limit of 3 substituting samples considered acceptable. Therefore up to 5 substituting samples are acceptable.

It seems unlikely that with 36 initial samples (12 per year on average) there is a need to complete the data set after the substitution. In any event the samples initially disregarded could be used to complete the requested number of samples or to ensure the frequency.

2) *Should MS report what is 'STP-end confirmation sample' and 'STP replaced sample'?*

It is advised that MS report samples during STP (confirmation sample included). The samples are disregarded in the assessment only if enough substituting samples are also reported (see above). Confirmation samples should be taken within seven days after the end of short-term pollution).

To treat short-term pollution events in assessment correctly, MS will be asked to explain what is 'STP-end confirmation sample' and 'STP replaced sample' when they report short-term pollution event, but give no additional information (e.g. in attr. ManMeas in Seasonal information on bathing waters table).

- 3) *Shall we report also short term pollution events happened out of the days of the monitoring calendar in Short term pollution table?*

Yes, if the STP took place within the bathing season.

4 Closed/permanently closed and not sampled bathing waters

4.1 *Closed in previous year, closed or permanently closed in next season?*

- 1) *Should a bathing water be still monitored and classified as 'closed' although it does not meet the definition of a bathing water anymore? Could a bathing water 'closed' in the previous year be permanently closed?*

A site for which a permanent prohibition of bathing or a permanent advice against bathing has been released is not considered to be under the Directive. A bathing water that has been classified as 'poor' for five consecutive years has to receive a permanent bathing prohibition or permanent advice against bathing (Article 5.4.b). Moreover, a Member State could release such permanent prohibition or advice before. No obligation remains as regards monitoring or assessment since the site is not considered a bathing water any longer.

When the closure has been temporary (i.e. lasting less than one year) then the obligations as regard monitoring and assessment remain. In the Commission's view, bathing sites having been classified as "poor" should be closed the following year for the entire season (Article 5.4.a.i).

Non-permanently closed bathing waters have to continue being sampled and assessed. Only when they are no longer poor they could be reopened again. If monitoring was not done, MS should provide explanation.

4.2 *Closed/permanently closed and/or not sampled in previous year(s), re-opened in next season*

- 1) *How to assess a reopened bathing water that was closed in previous year(s) and sampled? How to assess reopened bathing waters that were closed in previous seasons and sampled, but the number of samples is not sufficient (less than four)? How to assess bathing waters that were closed and not sampled?*

If a temporary closed bathing water or closed bathing water for the entire season was monitored in previous year(s), samples for that bathing season are included in assessment to have sufficient data set for four years.

If the samples do not meet the conditions specified by the Directive (i.e. frequency or number), in pure strict terms, the water should be considered insufficiently sampled. At present, the practice is to classify them as 'changes' until necessary set of samples is available.

When permanently closed bathing waters are reopen they are classified as 'changes' until necessary set of samples is available.

If a bathing water is closed and changes occur that affect the classification, MS should fill the attr. Changes with 'Y' (Seasonal information on bathing waters table). For the 2011 season assessment, ETC/ICM already filled attr. Changes with 'Y' if not given by MS. For the 2012 season assessment, ETC/ICM will not act itself (closed bathing water could only be reported as 'changes' if water quality had been affected during the closure.)

- 2) *Could not-sampled bathing waters or bathing waters that were closed and not sampled or permanently closed in previous years, be assessed by using data from prior seasons to reach in total 16 samples if no changes occur?*

The following examples are added to better illustrate the cases:

Assessment of reopened (closed in previous year) bathing water for the 2012 season using data for the period 2009-2012:

- 1) A bathing water is closed in 2011 and not sampled. No changes that affect classification occur but only prevent sampling. Four samples per season are available for 2009, 2010 and 2012. *Can samples from prior season of 2008 be added to have sufficient number of data sets (4) and number of samples (16)?*

closed				
2008	2009	2010	2011	2012
4 samples	4 samples	4 samples	0 samples	4 samples

- 2) A bathing water is closed in 2011 and not sampled. No changes that affect classification occur but only prevent sampling. 16 samples are available for 2009, 2010 and 2012 (at least 4 sample per season). *Can a bathing water be assessed using samples from 2009, 2010 and 2012?*

closed			
2009	2010	2011	2012
5 samples	7 samples	0 samples	4 samples

These questions cannot be answered in general terms: it will depend on the reasons of the closures or the explanations to the lack of monitoring. In any event, if a bathing water was closed for the entire season it cannot be assessed if it is not properly monitored, even though there are more than 16 samples in previous seasons.

4.3 Temporarily closed and closed for entire season in the latest year

- 1) *How to assess temporarily closed bathing waters in the latest year? Can closed bathing water for the entire season in the latest year be assessed?*

For the 2011 season assessment, all temporarily closed bathing waters were assessed regardless the period of closure and reasons for the closure. 42 out of 445 temporarily closed bathing waters in Europe were classified as ‘not compliant’/‘poor’ for the 2011 season.

At present, a bathing water closed for the entire season (existing, newly identified or with changes) in the latest year is classified as ‘closed.’ However, the quality of temporarily closed but sampled bathing waters can be assessed. The Commission is of the opinion that the distinction between quality (whichever corresponds) and status (closed, open, etc) should be better taken into consideration in the future. There should be also kept in mind that "closed" is not the same than "failed" (‘closed’ does not always mean ‘poor’).

The following examples are added to better illustrate the cases:

Assessment of closed bathing water for the 2012 season using data for the period 2009-2012:

- 1) A bathing water is closed in 2012 and monitored. The closure was therefore temporary. No changes that affect the classification occur but only prevent sampling. Four samples per season are available for each season. It can be assessed..

			closed
2009	2010	2011	2012
4 samples	4 samples	4 samples	4 samples

- 2) A bathing water is closed in 2012 and monitored. The closure was therefore temporary. Changes that affect the classification occur. Four samples per season are available for each season. A bathing water is classified as ‘closed’. In principle, the assessment should be carried out with samples from the 2012 season on.

			closed, changes
2009	2010	2011	2012
4 samples	4 samples	4 samples	4 samples

- 3) A bathing water is closed in 2012 and not sampled. No changes that affect classification occur but only prevent sampling. Four samples per season are available for the previous three years. In principle the water should be considered insufficiently sampled. In practice (to be progressively changed), it could be classified as ‘closed’.

			closed
2009	2010	2011	2012
4 samples	4 samples	4 samples	0 samples

- 2) *What to do when a bathing water is closed for the entire season and there are no data in one of the seasons needed (e.g. 2009 data, 2010 data, **2011 no data**, 2012 data)?*

This question cannot be answered in general terms: it will depend on the reasons of the closures or the explanations of the lack of monitoring.

In any event, if a bathing water was closed for the entire season it could be assessed only if it was properly monitored. This implies meeting both the number of data sets to be used and the number of samples.

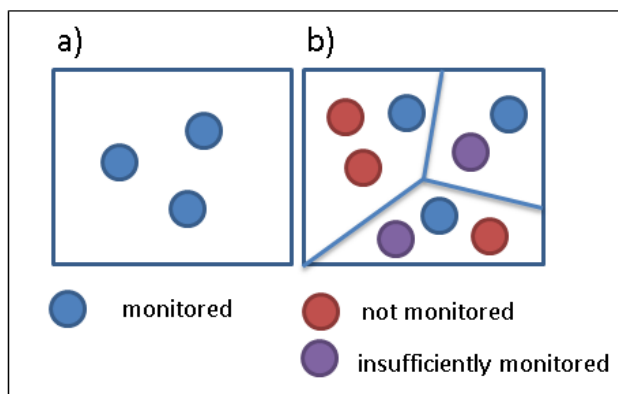
5 Grouping bathing waters

5.1 Assessment with bathing water groups

- 1) *What rules are applied for bathing water groups and when?*

The Directive does not specify particular rules as regards the assessment of groups of bathing waters. In practice, following assessment rules are applied:

- If bathing waters are grouped and all are monitored, they are assessed by their own samples.
- In practice, a status for the group is assigned when it consists of monitored and not monitored waters or insufficiently monitored waters (number of samples or frequency). The samples obtained during the season from any of those that are monitored will be treated as one set of samples for the group. The classification is done on the basis of this sample set. Each bathing water in a group gets this classification. See examples in a schematic view below.



Assessment with bathing water groups is only possible when assessment under the new bathing water directive has already started and provided that bathing water profiles have been established.

- 2) *How to assess monitored bathing water in a group if its own status differs from status for a group (one sample set)?*

The Directive does not specify particular rules as regards the assessment of groups of bathing waters. If a bathing water gets different quality classification than the rest of the group, this could lead to the splitting of the group.

- 3) *How to assess grouped bathing waters with different seasons when one sample set for a group is applied?*

In such a case, the start and the end of the season is taken from grouped bathing waters with samples. If there is a different duration for the seasons for two or more monitored bathing waters, the MIN of the start and the MAX of the end is considered. It seems nevertheless strange that in the same group the composing waters have different bathing seasons.

- 4) *How to assess grouped bathing waters if one is permanently closed in the latest year?*

If a bathing water in a group is permanently closed for the latest season, it is not included in statistics, it could even be considered that it should be excluded from the group, but its samples from the previous years are considered in sample set for the group.

- 5) *How to assess grouped bathing waters if one is closed in the latest year?*

If a bathing water in a group is closed during the latest season, it is classified as 'closed', though its samples from the previous years and the latest year (if monitored) are considered to belong to the data set for the group. Closed and sampled bathing waters can be classified into quality class (i.e. gets status from one sample set for a group), unless the closure is due to a poor status.

- 6) *In case of bathing water group, can all samples be taken from either one or another bathing water, or shall two samples be taken from one and two samples from another bathing water?*

The Directive does not specify particular rules as regards the assessment of groups of bathing waters. In practice, it is a decision to be taken by Member States. The set of samples should be representative for the bathing waters in the group. Four samples is a minimum for a group. However, four samples can be taken per each bathing water or four samples can be taken at one (representative) bathing water and some additional samples at the other one.

6 Status calculation and classification

6.1 Formula for status calculation

- 1) *What formula for standard deviation to use (divisor 'N' or 'N-1')?*

The Directive does not specify the formula to be used. According to Guidelines issued by the World Health Organization,¹ the formula for the ‘sample standard deviation’ should be used as follows:

$$s_1 = \sqrt{\{[\sum x^2 - (\sum x)^2/n]/(n - 1)\}}.$$

Results using ‘N-1’ are worse than those results using ‘N’ for the 2011 season for a total of 101 bathing waters (1% of all those assessed under the new Directive). The effect is that 57 bathing waters are good instead of excellent; 31 bathing waters are ‘sufficient instead of good and that 13 bathing waters are poor instead of sufficient.

6.2 Minimum and upper limit of detection

1) How to deal with values above the upper detection limit in status calculation?

The Directive does not deal with the maximum possible value of the detection limit. According to Data Dictionary the maximum value is set to 35.000 since the upper detection limit is 35.000 with 2 dilutions for all methods as agreed at the workshop on reporting under the Bathing Water Directive(s) in 2009.. Therefore, 35.000 is used as a maximum value in status calculation if higher values are reported.

6.3 Identification code and bathing water type

1) Why is important to provide an old identification code in case of change?

The old code should be provided to ensure that data from the old and the new code of a bathing water are linked, allowing assessment under the new Directive. This has implications for the assessment under the new bathing water directive (e.g. to avoid that bathing waters are classified as ‘insufficiently sampled’ due to missing data from the old code as well as for the visualisation of the results (e.g. map and data viewers: a bathing water is presented twice, with the old and the new code). A code change can result from the fusion of two bathing waters. In such a case, historical data of both bathing waters are assigned to new code.

Member States are asked to provide a mapping table of the old and corresponding new code (BWID) if code changes are not reported under attr. Change (Inventory of identified bathing waters table) for the years included in assessment.

2) Why to check consistency in identification codes between reporting tables?

¹ "Monitoring bathing waters: A practical guide to the design and implementation of assessments and monitoring programmes"
(at http://www.who.int/water_sanitation_health/bathing/monbathwat.pdf; Box 8.2)

If an identification code (BWID) is not consistent in reporting tables (i.e. a bathing water is not listed with the same code in tables), a bathing water will be classified as 'insufficiently sampled'.

MS should do a cross-check of identification codes (BWID) in reporting tables by code linking. BWID as given in Inventory of identified bathing waters table should be used in all tables.

3) *How the bathing water type influence the classification?*

In case of code change, a bathing water should be reported as an existing (BWType is '1') in order to link data from the old and new code for the assessment. If a bathing water is reported as a new one (BWType is '2'), only the years under the new code will be considered in assessment and this can result in class 'insufficiently sampled'.

If a bathing water is re-opened (closed or permanently closed in previous year(s)), it should be reported as an existing (BWType is '1'). If a bathing water is reported as a new (BWType is '2'), only the years since re-opening can be considered in assessment.

If a bathing water is newly identified but reported as existing (BWType is '1'), it will be treated as existing (four years needed for assessment) which results in class 'insufficiently sampled'.

MS should pay attention on reported type of a bathing water for the years included in assessment. For the 2011 season assessment, ETC/ICM checked a type of a bathing water and changed it if not appropriate (new to existing if a bathing water is re-opened or existing in previous year according to BWID)

6.4 *Classification*

1) *How to classify salt lakes (as inland or coastal/transitional waters)?*

As a general principle, classification under the WFD prevails. If salty waters are 'lakes' under the WFD, they should be considered also lakes for the purposes of the bathing water directive (therefore inland waters).

2) *Why bathing waters classified as 'new' or 'changes' should be included in the total number of bathing waters assessed under the Directive 2006/7/EC?*

To carry out the general assessment under the Directive 2006/7/EC also bathing waters classified as 'new' or 'changes' are included in a total number of bathing waters to give complete information about the status of bathing waters in Europe. This also makes the comparison with previous years possible ('insufficiently sampled', 'new', 'changes' compared to 'insufficiently sampled' under the assessment under the Directive 76/160/EEC and transition period assessment).

3) *Are colours for classes of bathing water classification appropriate?*

Note taken. The code of colours will be reconsidered.

7 Reporting issues

7.1 *Bathing water locations (before the season)*

- 1) *Shall the bathing water locations as reported before the season be provided in pre-prepared Excel template?*

Member States are obliged to annually identify all bathing waters (Article 3.1) and to notify the Commission of all waters identified, including the reason for any change comparing to the precedent year before the start of the bathing season (Article 13.2).

Some MS do not report bathing water locations before the season in pre-prepared Excel template (Inventory of identified bathing waters table), but in PDF/Word file or Excel file not using pre-prepared template. The list of bathing water locations as reported before the season is not used for bathing water quality database and assessment, except if no list (inventory) is re-delivered by the end of the year provided that pre-prepared Excel template was used.

If changes compared to the previous year (including reasons for changes) are not available before the season, MS can report them till 31 December.

7.2 *Monitoring results*

- 1) *Should monitoring results from previous years be re-delivered when assessment under the new bathing water directive starts?*

MS do not need to re-deliver data for the previous three years when assessment under the new bathing water directive is done for the first time. Not reported samples from previous years can be incorporated if available in order to satisfy sampling frequency rules.

- 2) *Can data be reported from the years before the bathing water is identified to be included in assessment under the new bathing water directive?*

It is possible if samples are complied with what the new bathing water directive requests (methods, periodicity, etc.). Complete data should be provided (all reporting tables: inventory, seasonal information, etc.).

- 3) *How to define GroupID and report samples for grouped bathing waters?*

There is no rule for defining GroupID. It has been a practice by some countries that a GroupID is slightly modified BWID of a representative bathing water (e.g. one character differs such as G instead of one number in a code). If none of the bathing waters in a group is representative, a code different from the coding of individual bathing waters may be assigned.

In Monitoring results of bathing waters table, samples should be reported for individual bathing waters (BWID) and not for a group (GroupID).

7.3 Automatic QA/QC procedure

1) Why automatic QA/QC (quality assurance/quality control) is not activated after uploading data files in Eionet - Reportnet Central Data Repository (CDR) envelope?

For the reporting for the 2011 season an automatic QA/QC procedure was enacted. After uploading Excel data files in the CDR envelope, it was converted into XML files (one XML file for each reporting table), and its quality was assessed and controlled.

Based on experience from reporting for the 2011 season, the automatic assessment and control takes place only if the following directions are respected:

- A new envelope under the respective folder for BWD reporting has to be created: do not upload the data file in the old envelope from Spring/Summer including the inventory of identified bathing waters.
- Please use the latest Excel template for reporting given in the letter with the data request. If not, the following notice will be given under feedback - conversion log:

Conversion log

 The MS Excel file uses an obsolete template. The last version of given dataset is released on 23 Dec 2011 with ID=2944. (31 Dec 2011 13:44:25)

- Please keep the original names of all reporting tables (the year 1976/2006 in the names of the tables relates to the Directive 76/160/EEC and the Directive 2006/7/EC, respectively).
- Please do not change column names of reporting tables or add filters to column names.

If these instructions are not considered, the following notice will be given under feedback - automatic QA results:

1. BWID values check

If Inventory of identified bathing waters table is not empty then all BWID values available in the tables Bathing season, Monitoring results, Abnormal situations and Short term pollution must be available in the Inventory of identified bathing waters table.

INFO - Did not execute the script, because the Inventory of identified bathing waters table is empty

2. StartDate and EndDate values check

If Inventory of identified bathing waters table is not empty then all years from StartDate and EndDate values in Seasonal information table must be the same as Year_BW from Inventory of identified bathing waters table.

INFO - Did not execute the script, because the Inventory of identified bathing waters table is empty

If some QA issues could not be solved before the deadline (31 December), MS should inform ETC/ICM when this information will be provided.

2) How to deliver further corrections/updates during QA/QC phase?

Corrections/updates should be delivered in requested template, but this re-delivery should contain only corrected/updated records. This prevents inserting the whole data file in da-

tabase several times and asking MS to clarify what are the changes in corrected/updated delivery.

3) *Why to check water category in relation to coordinates of bathing waters?*

Automatic QA/QC only checks if bathing waters are inside the country boundaries.

Instructions: MS should pay attention to consistency between water category and location (coordinates) of their bathing waters (i.e. coastal waters on the coast, inland waters in mainland). If water category and location do not correspond, it should be checked what is wrong (water category or coordinates). Google Earth could be used for that purpose during check of national assessments (See map below showing coastal bathing waters).



4) *How to report values of Escherichia coli and intestinal enterococci below minimum limit of detection? Automatic QA/QC shows error if zero values are reported.*

Zero values indicate value under the minimum limit of detection. Zero values have to be replaced by minimum limit of detection for assessment under the new bathing water directive, while this is not needed if assessment under the transition period rules is still done. Member States are asked to provide value of minimum limit of detection for previous three seasons (if not reported) when the assessment under the new bathing water directive starts.

5) *Automatic QA/QC indicates error if no information is provided under attr. Change in Inventory of identified bathing waters table for temporarily closed/closed for the entire season and permanently closed bathing waters. Should reasons for closing and period of closure (if temporarily closed) be systematically reported? Are this information “mandatory to report” in the frame of the new bathing water directive?*

Member States are obliged to annually notify the Commission of all waters identified, including the reason for any change comparing to the precedent year (Article 13.2). Mem-

ber States have to inform the public in any case of the reasons, no matter whether the closure is one year long or shorter (Article 12.1.(e)).

The reporting of reasons for closing/permanently closing and period of closure is getting better every year.

8 MS collaboration in preparation of national reports

8.1 *The calendar*

The preparation of the EU report follows a tight calendar. The EEA and the Commission will make their best to ensure that there is enough time available for the consultation of Member States and for the assessment of their reactions.

It is advisable that MS send comments in time or only a few days after the deadline. When any choice made by the Member States has implications on the quality status, these should be clearly highlighted in the communications with the ETC.

Please also inform ETC/ICM about change of national reporters or their e-mail addresses in order to facilitate that they are reached in time.

8.2 *MS roles in BWD reporting and assessment*

ETC/ICM is satisfied with collaboration of Member States in the preparation of national reports. Besides reporting and checking national assessments some MS are active in giving comments on assessment rules and asking questions on specific issues which help to better define the assessment rules.

Some Member States publish their own national reports with additional information. The links to these documents (uploaded to Eionet - Reportnet CDR) are provided in national reports. If access is restricted, the document is not visible to the public.