



Bathing water assessment for 2012 season – Issues for discussion and consultation

Version: 0.2

Date: 19. September 2013

ETC/ICM task.milestone.submilestone: 1.4.1.c and 1.5.1.f:

Bathing water reporting and visualisation
(1.4.1.c: Freshwater and 1.5.1.f: Coastal part)
Milestone 8: MS Reporting for 2013 season

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Version History

<u>Version</u>	<u>Date</u>	<u>Author</u>	<u>Status and description</u>	<u>Distribution</u>
<u>0.1</u>	<u>16./07/2013</u>	<u>Lidija Globevnik</u> <u>Tina Kirn</u> <u>Marko Kovačič</u>	<u>First draft</u>	<u>ETC ICM</u>
<u>0.2</u>	<u>19./09/2013</u>	<u>Lidija Globevnik</u>	<u>Final draft</u>	<u>ETC ICM</u>

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1 Introduction

This document describes a bathing water quality assessment procedure for 2012 bathing season and identifies issues and problems raised by Member States (MS) under the EU Bathing Water Directive 2006/7/EC (hereinafter referred also as the Directive) during QA/QC phase.

The results of the assessment are presented in:

- 29 national BW quality assessments reports
- the EU summary report and
- final BWD 2013 data base

In 2012 all MS reported under the Directive. Bathing water quality in 9 MS and Switzerland was assessed using transitional period rules. In 19 MS bathing water quality has been assessed using data and information as reported for the last four bathing seasons.

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

The technical rules for the analysis of reported data and information under the Directive developed during the transition 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.

2 Assessment issues and questions raised by MS during 2012 bathing season assessment under Directive 2006/7/EC

The assessment has been conducted making use of a number of rules, which translates the provisions in the Directive. Most of these technical rules have been used in the assessment carried out in previous bathing seasons.

There are still some questions to be fully answered as regards some provisions in the Directive. Furthermore, not all Member States understand these provisions in the same way.

The Commission and the EEA expect that the currently on-going preparation of the reference document for the provisions of the Directive related to monitoring and assessment will eventually make unnecessary the interim rules and understanding agreements.

2.1 *Length of data sets*

2.1.1 Changes that affect the classification

General observation:

It seems that the information to be provided regarding changes, under Article 4.4. (b) of the Directive, introduced in the field <changes> is misunderstood by some MS. Some have reported other changes, such as changes of some reported fields (attribute of the field Class has changed, or of the field BW name). Further explanations have been requested to ascertain whether changes actually affected the classification.

It should be highlighted that the Directive indicates that 'changes' are linked or 'likely' to be linked to changes in the quality of the bathing water. If changes have occurred that affected or could have affected the quality classification, then the attribute in the field Changes should be 'Y.' That way, the bathing water concerned is recognized in the assessment.

Specific questions raised by countries:

Q: What samples are taken in the assessment when changes that affect classification occur?

A: The samples are taken from the year when changes are reported unless MS specify differently (taken from the date after the changes occurred or from the next year after changes). The minimum number of samples per year should be 4 (or 3 at shorter bathing period than eight weeks or at special geographical constraints)

2.2 Sampling

2.2.1 Sampling frequency rules

General observation:

In the assessment of a bathing water quality in 2011 season two sampling frequency rules were applied, 'less strict' and 'strict rules'. Under the less strict rules interval of frequency has been changes only number of samples was checked for the previous seasons (2010, 1009, 2008), while under the strict rules also an interval not exceeding 41 days between samples was checked. Both assessments were presented in the report of bathing water quality in Europe in 2011. In the draft assessment of a bathing water quality in 2012 season the strict rules was applied for the last year (2012). The interval between samples in previous years was also checked. Some countries complained,

For the 2012 season assessment under Directive the following sampling frequency rules are applied:

- one pre-season sample should be available,
- the interval between sampling dates in 2012 should never exceed 35 days (31 days + 4 days delay allowed), provided that the next sampling is done according to the monitoring calendar (refers to interval between the pre-season sample and the first sample during the season, interval between samples during the season and interval between the last sample during the season and the end of bathing season);
- the yearly number of samples in the previous years should be four or three if bathing season does not exceed eight weeks or the region is subject to special geographical constraints;
- the number of samples for the assessment period should be at least 16 or 12 if season duration is less than eight weeks or the region is subject to special geographical constraints.

A bathing water is classified as 'insufficiently sampled' in 2012 if pre-season sample in 2012 is missing, sampling frequency is not satisfied or the set of data is not complete

Specific questions raised by countries:

Q: Is it in accordance with the Directive that the interval between samples for the previous season is not considered?

A: As already discussed at the Committee meeting in Brussels 28 September 2012, a bathing water with the classification 'insufficiently sampled' in one year should not be classified 'insufficiently sampled' for the following three years provided that the total number of samples is sufficient. Therefore, the status 'insufficiently sampled' should only be given in the year where the problem occurs. The number of samples per each year should be at least 4 (or 3 at shorter bathing period than eight weeks or at special geographical constraints), unless there is an acceptable and communicated reason for less.
(OK)

Q: Should the interval between a pre-season sample and the first sample during the season be considered in the interval check?

A: 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 (+ 4) days between the preseason and the following sample).

Q: In what circumstances are accepted exceptions to interval between samples (more than 4-day delay as allowed in monitoring calendar)? How long interval (delay) is still acceptable?

A: Last sentence in Article 3.4 indicates that the samples shall be taken no later than four dates after the date specified in the monitoring calendar. The Commission intends to strictly apply this provision starting in the 2014 season. In practice, larger interval could have been 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 at the dates initially specified or the use of the samples obtained for the 2013 season

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

A: 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

2.2.2 Monitoring calendar

General observation:

By the Directive provisions, 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). As explained at the Bathing water committee in 2012, the four days of flexibility are not to be cumulated. This means that an initial delay does not move the next sampling date. The reporting of a monitoring calendar would ease checking delays,

To overcome the problem of not knowing monitoring calendars for 2012 bathing season, the following rule was used for 2012 assessment: the interval between two samples in year 2012 should not exceed 31+4 days and interval between three samples should not exceed 62 days.

Some MS indicate is that this rule is not in accordance to the Directive. They suggested that an interval of 35 days must be taken into account ($2 \times 31 + 4$ days must be allowed). Accepting such an approach would be easier if the monitoring calendar was reported to the EEA, before the start of a season, allowing checking of sampling dates and delays.

Specific question raised by countries:

Q: 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.)?

A: 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 of the season.

2.3 Short-term pollution and abnormal situation

2.3.1 Definition of short-term pollution and abnormal situation

General observation:

Many countries asked how to distinct between short-term pollution (STP) and abnormal situation. In Article 2, the Directive offers the definition and classification of different situations and events. In principle, the duration and the period of return could be enough. However, it should be acknowledged that the classification of the event (and therefore the possibility to suspend the monitoring calendar), may require some time which could not be available. 'A posteriori' classifications should be accepted, provided that these are made before the end of the season.

Specific question raised by countries:

Q: In case that an incident impacts the quality of several bathing waters, should we regard each bathing water as a separate abnormal situation, or is the incident itself the abnormal situation?

The definition of 'abnormal situation' in the Directive in Article 2.9 considers that an event (or combination of events) impact on the quality 'at the location concerned.' Each location would therefore constitute (or suffer) an abnormal situation.

Q: How long a short-term pollution event can last? Should the time limit of STP be applied in the assessment (some range given, e.g. from 2 days to 1 week)?

A: Article 2.9 of 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.

Q: How many short-term pollution events per season are acceptable? Should there be a limit?

A: The Directive does not specify any limit for the number of short term pollution events. Up to 7 STP events per season were reported for the 2012 season. For most bathing waters one STP event per season was reported.

2.3.2 Short-term pollution in reporting and assessment

Q: The Directive is clear that the short term pollution discounting rules do not apply to poor bathing waters. But if a bathing water is 'poor' in Year 1 and improvements are made and it is 'good' in Year 2, can the data reported for Year 1 be altered in Year 2 to retrospectively allow for short term pollution discounting, assuming all relevant management measures were in place? What we are asking is if the whole 4 year dataset can be reviewed and revised for

each classification, or if the data reported annually cannot be changed until it drops out of the dataset.

A: Article 4.2 (b) requests that the assessment is carried out after the end of each bathing season. Quality classes obtained should not be changed. The answer to the last question is affirmative: the data reported annually could not be changed until it drops out of the dataset. In principle, data could be changed only to remediate factual mistakes.

Q: If we can discount 1 sample (or 15% of total) per year, Annex II implies we can discount from the whole 4 year data set, which could mean retrospectively changing a result (if all management measures etc were in place). Can this be done in practice?

A: Annex II would not allow to 'reopen' the assessment carried out in past seasons or to disregard data from past seasons that were not changed at each season concerned.

The assessment is conducted after the end of each season, and Annex II would set a sort of criteria to accept the validity of the results of the calculations of the percentile values. If the number of STPs events identified in a season entails that the samples disregarded and substituted goes beyond the limits allowed, the classification would not be valid. Instead of short term pollution events the bathing water concerned would be facing a structural problem affecting its quality.

2.4 Closed or permanently closed bathing waters

2.4.1 Poor status in previous year, what classification in next season? Closed in the latest year?

General observation:

As discussed on the Bathing Water Committee in 2012, bathing sites having been classified as 'poor' should be closed the following year for the entire season (Article 5.4.a.i). At the same meeting some countries stated that if a bathing water of poor status in the previous year had low values of pollution in the next season (weekly sampling), it could be possible to close it only for a part of the season and not the whole bathing season. The Commission acknowledges the difficulty to understand the terms 'temporary' and 'temporarily closed' as they are used in the Directive.

Out of 184 bathing waters classified as 'poor' in 2011, only 16 bathing waters were reported as closed for a part or the entire season in 2012. Four bathing waters were reported as permanently closed. Poor bathing waters in 2011 could also be reported as 'changes' in 2012, if measures were introduced that affect classification.

All bathing waters reported in 2012 having at least four (three at shorter bathing period then eight weeks) samples in 2012 got quality class. Consequently, all bathing waters reported as closed in 2012 were assessed unless otherwise indicated by the country. Poor bathing waters in 2011 with changes that affected classification get class 'changes' until the necessary set of samples is available.

Specific questions raised by countries:

Q: How to assess temporarily closed bathing waters (i.e. closed for part of the season or the entire season) in the latest year?

A: In 2011 season assessment bathing waters closed for a part of the season were classified if there was a complete set of data available. Otherwise, they were classified as 'closed'. Bathing waters closed for the entire season were classified as 'closed' regardless the availability of samples.

In the 2012 season assessment all closed bathing waters (closed for a part of the season or the entire season) are classified if there is a complete set of data available. Otherwise, they are classified as 'closed' (not sampled or less than 4 (3) samples are available per season). Interval between samples is not checked due to closure.

Q: If bathing water is temporarily closed at the beginning or at the end of planned bathing season, how to consider the length of season (excluding days of closure or not)?

A: In principle, any event leading to the closing of the bathing water should be considered, above all when they are within the bathing season. Notifying shorter bathing seasons with a view to eliminating these references is not allowed.

2.4.2 Closed/permanently closed and not sampled in previous year(s) and opened/re-opened in a next season

Q: Could a bathing water that was closed and not sampled in one of the previous years, be assessed by using data from prior seasons to reach in total 16 samples if no changes that affect the classification occur?

A: The classification depends on the reasons of the closure. In the Bathing Water Committee meeting in 2012, it has been discussed that, 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). Some countries do not support that position and argued that samples from previous seasons (to get four year of data) should be included.

In the 2012 season assessment closed bathing water in one of the previous years (re-opened) was assessed if at least 16 (12) samples are available in the period 2009-2012 and the number of samples per season is 4 (3). If 16 (12) samples are not available, samples from 2008 were added to data set. Samples in closed season were not checked (i.e. can be less than 4 (3)). If these criteria are not meet, a bathing water was classified as 'insufficiently sampled'.

Q: Should a bathing water that was permanently closed in previous years and re-opened be classified as 'changes' even if no changes occurred that affect classification during permanent closure?

A: When permanently closed bathing waters for more than one season are reopened they are classified as 'changes' until necessary set of samples is available.

If a bathing water has been permanently closed for only one bathing season and reopened in the next season, it should have been assessed .

2.5 Grouping bathing waters

General observation:

In 2012 bathing season 160 bathing waters in seven countries are assessed within a 'group' status. In total, 60 bathing waters groups were assessed, 36 in Hungary (106 bathing waters).

The Directive does not specify particular rules as regards the assessment of groups of bathing waters as has been already recognised on Bathing Water Committee meeting in 2012. There are many considerations (questions) still opened such are:

- representative/non-representative bathing waters and number of samples: How to do assessment if a sample is reported for more than one bathing waters in a group for the same day? Should there be a mean/median taken as representative sample or should only a sample from other bathing waters be included into a data set. If a sample from a representative bathing water is not available, can that also be a sample from non-representative bathing water? Which one, with lower or higher concentration?
- length of bathing season: Bathing seasons of bathing waters in one group do not necessarily have the same length. Should all waters be given the same length of bathing season taking into account they should have same characteristics.
- a bathing water in a group is not reported anymore (is permanently closed): Should we include samples from permanently closed bathing water that has been a member of a group into a group data set?
- Some (or all) members of a bathing water group have enough samples: In a case that bathing water has enough samples, should we assess it individually?

For the assessment of the 2012 season, an unique status for all members of a group has been assigned regardless the availability of samples for individual bathing waters. The samples obtained during the season from any of those sites that are monitored are treated as one set of samples for the group.

Specific questions raised by countries:

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

A: 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.

Q: How to assess grouped bathing waters with different seasons when one sample set for a group is applied?

A: In 2012 season, 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.

3 Conclusions

The report describes the major issues that have given rise to the country during an assessment of bathing water quality in Europe in season 2012. The content of the questions were divided by the area and the first to describe the general problem. Some of the specific issues and the responses prepared by the EEA/ETC are presented.

The document represents the current level of common understanding of the Directive and subject to change according to decisions of the European Court of Justice.