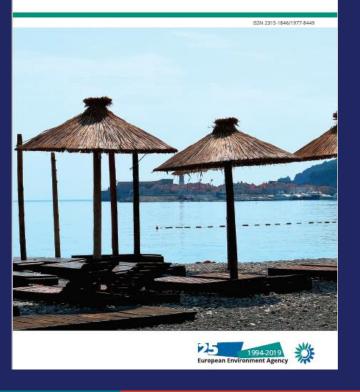
European Bathing Water Quality in 2018



Bathing water data reporting 2020

XX March 2020– Bathing water reporting 2020 , ETC/ICM – TC Vode Peter Kristensen, EEA

**European Environment Agency** 

# Content

- 1) Data call for 2020 bathing season: revised data model;
- 2) Specific issues related to bathing water data reporting
  - Prohibited, inaccessible, and delisted bathing waters
  - Short Term Pollution events
  - Bathing waters in groups
- 3) Assessment principles
- 4) Discussion (10 mins)

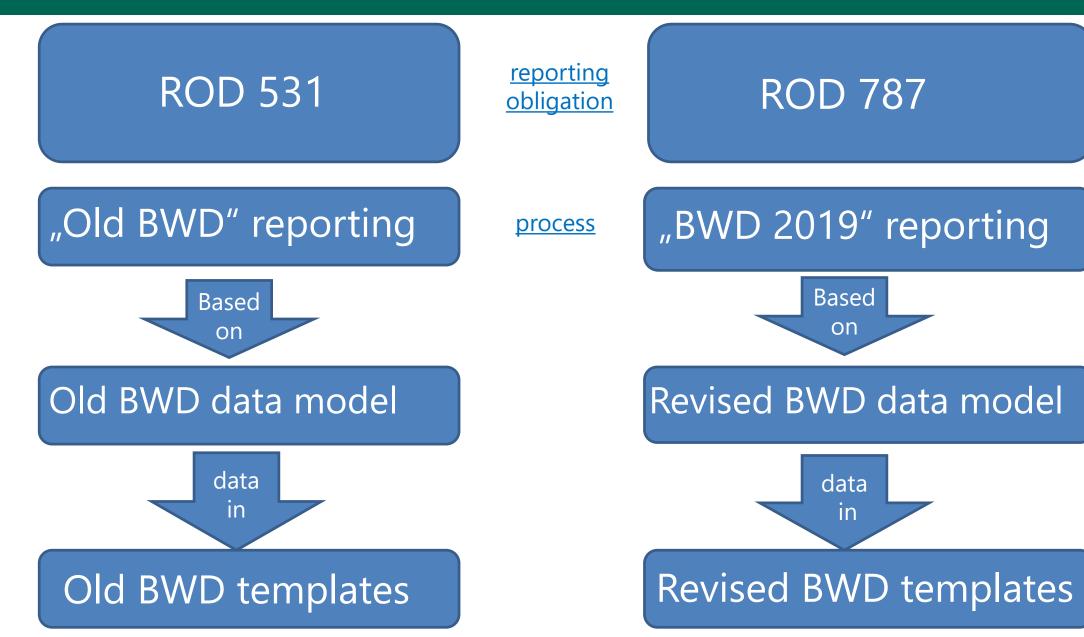
1. Data call for 2020 bathing season: revised reporting



# **2020 data call – BWD 2019 (revised)**

- EEA's future developments on improvements in reporting, Quality Controls (QC) and feedback information (dashboards) are concentrated on BWD 2019 and Reportnet 3.0.
- In 2019, EEA launched BWD 2019 reporting model, which will replace Old BWD reporting in 2020.
- BWD 2019 has a similar structure to Old BWD, improved performance, better options for feedback and (in the future) automatic calculation of status.
- The revised BWD 2019 reporting model requires some details on seasonal events e.g. short term pollution events that not all countries have reported under the Old Bathing water reporting.
- In 2020, it will also be possible to report via Reportnet 3.0 using the BWD 2019 reporting model. EEA plans in the coming months to arrange a Webinar to demonstrate Reportnet 3.0 functionality.

# Terminology we use:

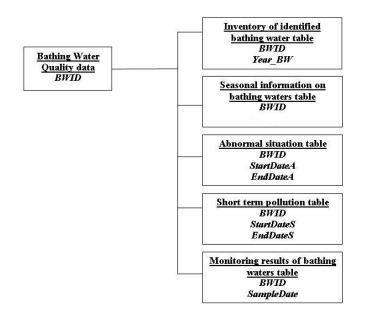


# 3.a: Old (existing) and revised BWD data model

# Old (existing) data model

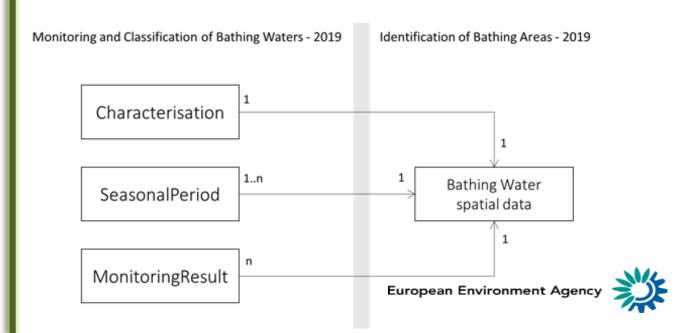
- Five relational tables;
- Management periods (bathing season, STP, abnormal situation) reported in **three** distinct tables (seasonal info, abnormal situations, short term pollution).

### WISE: Bathing Water Quality Data Model, Directive 2006/7/EC



### BWD 2019 (revised) data model

- Three relational tables (xls) + one spatial table (gml);
- Management periods (bathing season, STP, abnormal situation, cyanobacteria, inaccessible, bathingProhibition, delisted) reported in one table (SeasonalPeriod)
- Spatial table: Reporting done only once after that, only changes are reported (e.g. new BWs, change in coordinates).



# BWD monitoring and classification – differences between old and new reporting

New table	New attribute	Old (existing) table	Old (existing) attribute
	season	Identified	Year_BW
	bathingWaterIdentifier	Identified	BWID
	groupIdentifier	Identified	GroupID
Characterisation	qualityClass	SeasonalInfo	Class
	geographical Constraint	Identified	SpecGeoCon
	link		
	remarks		
	season		
		SeasonalInfo	BWID
	periodType		
SeasonalPeriod		SeasonalInfo	
			StartDate
			EndDate
		SeasonalInto	ManMeas
	season		
	bathingWaterIdentifier	MonitoringResults	BWID
	sampleDate	MonitoringResults	SampleDate
Monitoring Result	intestinalEnterococciValue	MonitoringResults	ConclE
	escherichiaColiValue	MonitoringResults	ConcEC
	sampleStatus		
		MonitoringResults	
	Characterisation  SeasonalPeriod	Season    bathingWaterIdentifier     groupIdentifier     qualityClass     geographicalConstraint     link     remarks     season     bathingWaterIdentifier     periodType     startDate     endDate     managementMeasures     remarks     season     bathingWaterIdentifier     pariodType      startDate     endDate     managementMeasures     remarks     season     bathingWaterIdentifier     sampleDate     intestinalEnterococciValue     escherichiaColiValue	Season   Identified   Identif



# BWD Bathing water spatial data – differences between old and new reporting

ROD	New table	New attribute	Old (Existing) table	Old (Existing) attribute
KOD	14ew table	New attribute	table	Longitude_BW
		geometry	Identified	Latitude_BW
		inspireIdLocalId	identified	Latitude_DVV
		inspireIdNamespace		
		inspireIdVersionId		
		thematicIdIdentifier	Identified	BWID
Waters		thematicIdIdentifierScheme		
ng		beginLifespanVersion		
<del>‡</del>		endLifespanVersion		
Ва		predecessors Identifier		
ation of	SPATIAL_ProtectedA	predecessors Identifier Sche me		
ific		successorsIdentifier		
ROD 788 - Identification of Bathing Waters		successors Identifier Scheme		
78		wise Evolution Type		
OC		nameTextInternational		
~		nameText	Identified	BWName
		nameLanguage		
		designationPeriodBegin		
		designationPeriodEnd		
		zoneType		
		specialisedZoneType	Identified	BWCat
		legalBasisName		

- Bathing waters are protected areas under the <u>WFD</u>. The register of WFD protected areas identifiers is kept in the <u>WISE WFDProtectedArea</u> vocabulary.
- Follows the requirements of the INSPIRE.
- Enables more systematic reporting of changes in bathing water IDs (successors, predecessors).
- Reporting of bathing water spatial data (ROD 788) will be enabled in summer 2020. Until then, new bathing waters (e.g. or changes in BW location, identifier...) can be reported within ROD 531.

# **Three datasets – Characterization – Bathing Season – Monitoring results**

	Α	В	С	D	E	F	G
1	season	bathingWaterIdentifier	groupIdentifier	qualityClass	geographicalConstraint	link	Remarks
2							
3							
4							
5							
4 5 6 7							
7							
8 9 10							
9							
10							
11							
12							
13							
14							
15							
11 12 13 14 15 16 17							
17							
14 4	Characterisa	tion / SeasonalPeriod / MonitoringResu	ilt / DO_NOT_DELETE_THIS_S	SHEET (*)		<b>1</b> ◀	

Monitoring results on intestinal Enterococci and Escherichia coli

Description of the bathing water season and other applicable periods

Characterisation of the bathing water



# **Dataset: Characterisation – Season (year of bathing season)**

			1				
	Α	В	С	D	E	F	G
1	season	bathingWaterIdentifier	groupIdentifier	qualityClass	geographicalConstraint	link	Remarks
2	2019	MS1010		1		0 http://www.bathingwater.ms/profiles/ms1010.pdf	
3	2019	MS1011		1		0 http://www.bathingwater.ms/profiles/ms1011.pdf	
4	2019	MS1012		2		0 http://www.bathingwater.ms/profiles/ms1012.pdf	
5	2019	MS1013		1		1 http://www.bathingwater.ms/profiles/ms1013.pdf	High-altitude BW
6	2019	MS1014		4		0 http://www.bathingwater.ms/profiles/ms1014.pdf	
7	2019	MS1015	MSG4	1		0 http://www.bathingwater.ms/profiles/ms1015.pdf	
8	2019	MS1016	MSG4	1		0 http://www.bathingwater.ms/profiles/ms1016.pdf	
9	2019	MS1017		1		0 http://www.bathingwater.ms/profiles/ms1017.pdf	
10	2019	MS1018		3		0 http://www.bathingwater.ms/profiles/ms1018.pdf	
11	2019	MS1019		0		0 http://www.bathingwater.ms/profiles/ms1019.pdf	
12							
13							
14							
15							
16							
17							
18							
$H \rightarrow P$	► ► Characterisa	tion / SeasonalPeriod / MonitoringResu	ult / DO_NOT_DELETE_THIS_	SHEET / 🖫 /		<b>1</b> ◀	

**Definition:** year of the bathing season

**Type:** integer (gYear)

# **Dataset: Characterisation – BathingWaterIdentifier**

Α	В	С	D	E	F	G
season	bathingWaterIdentifier	groupIdentifier	qualityClass	geographicalConstraint	link	Remarks
2019	MS1010		1		0 http://www.bathingwater.ms/profiles/ms1010.pdf	
2019	MS1011		1		0 http://www.bathingwater.ms/profiles/ms1011.pdf	
2019	MS1012		2		0 http://www.bathingwater.ms/profiles/ms1012.pdf	
2019	MS1013		1		1 http://www.bathingwater.ms/profiles/ms1013.pdf	High-altitude BW
2019	MS1014		4		0 http://www.bathingwater.ms/profiles/ms1014.pdf	
2019	MS1015	MSG4	1		0 http://www.bathingwater.ms/profiles/ms1015.pdf	
2019	MS1016	MSG4	1		0 http://www.bathingwater.ms/profiles/ms1016.pdf	
2019	MS1017		1		0 http://www.bathingwater.ms/profiles/ms1017.pdf	
2019	MS1018		3		0 http://www.bathingwater.ms/profiles/ms1018.pdf	
2019	MS1019		0		0 http://www.bathingwater.ms/profiles/ms1019.pdf	
	2019 2019 2019 2019 2019 2019 2019 2019	bathingWaterIdentifier  2019 MS1010  2019 MS1011  2019 MS1012  2019 MS1013  2019 MS1014  2019 MS1015  2019 MS1016  2019 MS1017  2019 MS1018  2019 MS1019	season         bathingWaterIdentifier         groupIdentifier           2019         MS1010         MS1011           2019         MS1012         MS1013           2019         MS1014         MSG4           2019         MS1015         MSG4           2019         MS1016         MSG4           2019         MS1017         2019           2019         MS1018         2019           2019         MS1019         MS1019	season         bathingWaterIdentifier         groupIdentifier         qualityClass           2019         MS1010         1           2019         MS1011         1           2019         MS1012         2           2019         MS1013         1           2019         MS1014         4           2019         MS1015         MSG4         1           2019         MS1016         MSG4         1           2019         MS1017         1           2019         MS1018         3           2019         MS1019         0	season         bathingWaterIdentifier         groupIdentifier         qualityClass         geographicalConstraint           2019         MS1010         1           2019         MS1011         1           2019         MS1012         2           2019         MS1013         1           2019         MS1014         4           2019         MS1015         MSG4         1           2019         MS1016         MSG4         1           2019         MS1017         1           2019         MS1018         3           2019         MS1019         0	Season   bathingWaterIdentifier   groupIdentifier   qualityClass   geographicalConstraint   link

**Definition:** unique identifier of the bathing water. Must be a valid bathing water identifier in the "WFDProtectedArea"

registry.

**Type:** string, 3-43 characters



# **Dataset: Characterisation – Group identifier**

	Α	В	С	D	Е	F	G
1	season	bathingWaterIdentifier	groupIdentifier	qualityClass	geographicalConstraint	link	Remarks
2	2019	MS1010		1		0 http://www.bathingwater.ms/profiles/ms1010.pdf	
3	2019	MS1011		1		0 http://www.bathingwater.ms/profiles/ms1011.pdf	
4	2019	MS1012		2		0 http://www.bathingwater.ms/profiles/ms1012.pdf	
5	2019	MS1013		1		1 http://www.bathingwater.ms/profiles/ms1013.pdf	High-altitude BW
6	2019	MS1014		4		0 http://www.bathingwater.ms/profiles/ms1014.pdf	
7	2019	MS1015	MSG4	1		0 http://www.bathingwater.ms/profiles/ms1015.pdf	
8	2019	MS1016	MSG4	1		0 http://www.bathingwater.ms/profiles/ms1016.pdf	
9	2019	MS1017		1		0 http://www.bathingwater.ms/profiles/ms1017.pdf	
10	2019	MS1018		3		0 http://www.bathingwater.ms/profiles/ms1018.pdf	
11	2019	MS1019		0		0 http://www.bathingwater.ms/profiles/ms1019.pdf	
12							
13							
14							
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16							
17							
18		tion Seasonal MonitoringResu	IF ON NOT DELETE THIS S				

**Definition:** unique identifier of the group of bathing waters. The identifier must follow

the syntax rules set for the WISE identifiers.

**Type:** string, 3-43 characters



# **Dataset : Characterisation – qualityClass (national bathing water quality classification)**

	Α	В	С	D	E	F	G
1	season	bathingWaterIdentifier	groupIdentifier	qualityClass	geographicalConstraint	link	Remarks
2	2019	MS1010		1		0 http://www.bathingwater.ms/profiles/ms1010.pdf	
3	2019	MS1011		1	1 0 http://www.bathingwater.ms/profiles/ms1011.pdf		
4	2019	MS1012		2		0 http://www.bathingwater.ms/profiles/ms1012.pdf	
5	2019	MS1013		1		1 http://www.bathingwater.ms/profiles/ms1013.pdf	High-altitude BW
6	2019	MS1014		4		0 http://www.bathingwater.ms/profiles/ms1014.pdf	
7	2019	MS1015	MSG4	1		0 http://www.bathingwater.ms/profiles/ms1015.pdf	
8	2019	MS1016	MSG4	1		0 http://www.bathingwater.ms/profiles/ms1016.pdf	
9	2019	MS1017		1		0 http://www.bathingwater.ms/profiles/ms1017.pdf	
10	2019	MS1018		3		0 http://www.bathingwater.ms/profiles/ms1018.pdf	
11	2019	MS1019		0		0 http://www.bathingwater.ms/profiles/ms1019.pdf	
12							
13							
14							
15							
16							
17							
18				D - C		a contain accellate also sifications	
14 -4 →	Characterisa	tion SeasonalPeriod MonitoringResu	ilt / DO_NOT_DELETE_THIS_S	_		g water quality classification.	
				Type:	: integer		
				Code	s: • 0 – not classif	fied	
					• 1 – excellent		

2 – good3 – sufficient

• 4 – poor

# **Dataset: Characterisation – Geographical constraints**

	Α	В	С	D	Е	F	G
1	season	bathingWaterIdentifier	groupIdentifier	qualityClass	geographicalConstraint	link	Remarks
2	2019	MS1010		1		0 http://www.bathingwater.ms/profiles/ms1010.pdf	
3	2019	MS1011		1		0 http://www.bathingwater.ms/profiles/ms1011.pdf	
4	2019	MS1012		2		0 http://www.bathingwater.ms/profiles/ms1012.pdf	
5	2019	MS1013		1		1 http://www.bathingwater.ms/profiles/ms1013.pdf	High-altitude BW
6	2019	MS1014		4		0 http://www.bathingwater.ms/profiles/ms1014.pdf	
7	2019	MS1015	MSG4	1		0 http://www.bathingwater.ms/profiles/ms1015.pdf	
8	2019	MS1016	MSG4	1		0 http://www.bathingwater.ms/profiles/ms1016.pdf	
9	2019	MS1017		1		0 http://www.bathingwater.ms/profiles/ms1017.pdf	
10	2019	MS1018		3		0 http://www.bathingwater.ms/profiles/ms1018.pdf	
11	2019	MS1019		0		0 http://www.bathingwater.ms/profiles/ms1019.pdf	
12							
13							
14							
15							
16							
17							
18							
14 4 1	Characterisa	tion / SeasonalPeriod / MonitoringResu	ilt / DO_NOT_DELETE_THIS_	SHEET / 🖫 /		[] ◀ [	

**Definition:** whether the bathing water is situated in a region

subject to special geographical constraints in

accordance with Annex IV of BWD.

**Type:** boolean (yes/no)

**Codes:** • 0 – false

• 1 – true



# **Dataset : Characterisation – Link (URL to bathing water profile)**

	А	В	С	D	Е	F		G
1	season	bathingWaterIdentifier	groupIdentifier	qualityClass	geographicalConstraint	link		Remarks
2	2019	MS1010		1		0 http://www.bathingwater.ms/profiles/ms1010	).pdf	
3	2019	MS1011		1		0 http://www.bathingwater.ms/profiles/ms1011	1.pdf	
4	2019	MS1012		2		0 http://www.bathingwater.ms/profiles/ms1012	2.pdf	
5	2019	MS1013		1		1 http://www.bathingwater.ms/profiles/ms1013	3.pdf	High-altitude BW
6	2019	MS1014		4		0 http://www.bathingwater.ms/profiles/ms1014	1.pdf	
7	2019	MS1015	MSG4	1		0 http://www.bathingwater.ms/profiles/ms1015	5.pdf	
8	2019	MS1016	MSG4	1		0 http://www.bathingwater.ms/profiles/ms1016	6.pdf	
9	2019	MS1017		1		0 http://www.bathingwater.ms/profiles/ms1017	7.pdf	
10	2019	MS1018		3		0 http://www.bathingwater.ms/profiles/ms1018	3.pdf	
11	2019	MS1019		0		0 http://www.bathingwater.ms/profiles/ms1019	9.pdf	
12								
13								
14								
15								
16								
17								
18								
14 4 →	Characterisa	tion / SeasonalPeriod / MonitoringResu	ilt / DO_NOT_DELETE_THIS_S	SHEET (*)		[] <b>(</b>	III	

**Definition:** hyperlink to document or web pages with the bathing water profile established

in accordance with Article 6 and Annex III of BWD.

**Type:** string, 0-2083 characters



# **Dataset: Characterisation – Remarks**

	Α	В	С	D	E	F	G
1	season	bathingWaterIdentifier	groupIdentifier	qualityClass	geographicalConstraint	link	Remarks
2	2019	MS1010		1		0 http://www.bathingwater.ms/profiles/ms1010.pdf	
3	2019	MS1011		1		0 http://www.bathingwater.ms/profiles/ms1011.pdf	
4	2019	MS1012		2		0 http://www.bathingwater.ms/profiles/ms1012.pdf	
5	2019	MS1013		1		1 http://www.bathingwater.ms/profiles/ms1013.pdf	High-altitude BW
6	2019	MS1014		4		0 http://www.bathingwater.ms/profiles/ms1014.pdf	
7	2019	MS1015	MSG4	1		0 http://www.bathingwater.ms/profiles/ms1015.pdf	
8	2019	MS1016	MSG4	1		0 http://www.bathingwater.ms/profiles/ms1016.pdf	
9	2019	MS1017		1		0 http://www.bathingwater.ms/profiles/ms1017.pdf	
10	2019	MS1018		3		0 http://www.bathingwater.ms/profiles/ms1018.pdf	
11	2019	MS1019		0		0 http://www.bathingwater.ms/profiles/ms1019.pdf	
12							
13							
14							
15							
16							
17							
18							
H 4 1	Characterisa	tion / SeasonalPeriod / MonitoringResu	ilt / DO_NOT_DELETE_THIS_S	SHEET / 💝 /		[] ◀	

**Definition:** Remarks, comments or explanatory notes.

**Type:** string, 0-1000 characters



# **Dataset: seasonalPeriod**

	А	В	С	D	E	F	G
1	season	bathingWaterIdentifier	periodType	startDate	endDate	managementMeasures	Remarks
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
11 12 13 14 15							
13							
14							
15							
16							
17 18							
18							
14 4	Characterisation	Seasonal Period Monitoring Result D	O NOT DELETE THIS SHEET /\$	7		4	

# **Dataset: seasonalPeriod - PeriodType**

					_				
	A	В			D	Ε		F	G
1	season	bathingWaterIdentifier	periodTyp	<u>e</u>	startDate	endDate	managementMeasures		Remarks
2	2019	MS1010	bathingSeas	on	2019-06-15	2019-08-31			
3	2019	MS1011	bathingSeas	on	2019-06-15	2019-08-31			
4	2019	MS1012	bathingSeas	on	2019-06-15	2019-08-31			
5	2019	MS1013	bathingSeas	on	2019-06-15	2019-08-31			
6	2019	MS1014	bathingSeas	on	2019-06-15	2019-08-31			
7	2019	MS1015	bathingSeas	on	2019-06-15	2019-08-31			
8	2019	MS1016	bathingSeas	on	2019-06-15	2019-08-31			
9	2019	MS1016	shortTermP	ollution	2019-07-18	2019-07-20	Malfunctioning sewage system resulted in	n water pollution.	
10	2019	MS1016	qualityChang	ges	2019-03-11	2019-05-13	Implementing UWWTD with construction	of new UWWT plants	
11	2019	MS1019	delisted		2019-06-15	2019-08-31			
12									
13									
14									
15									
16				Defin	ition: specifies	the type of se	easonal period		
17					•	, the type of st	addition period.		
18				Type:		a:Caaaa			
H 4 )	▶ ▶   Characterisation	SeasonalPeriod MonitoringResult D	O_NOT_DELETE_1	Code		_		Ш	
					<ul> <li>bathing</li> </ul>	gProhibition			
						ermPollution			
					<ul><li>abnorr</li></ul>	malSituation			
l					• inacces	ssible			

qualityChangescyanobacteriaBloomdelisted

other



# **Dataset: seasonalPeriod**

.4	А	В	С	D	Е	F	G
						· ·	_
7		bathingWaterIdentifier		startDate		managementMeasures	Remarks
2	2019	MS1010	bathingSeason	2019-06-15	2019-08-31		
3	2019	MS1011	bathingSeason	2019-06-15	2019-08-31		
4	2019	MS1012	bathingSeason	2019-06-15	2019-08-31		
5	2019	MS1013	bathingSeason	2019-06-15	2019-08-31		
6	2019	MS1014	bathingSeason	2019-06-15	2019-08-31		
7	2019	MS1015	bathingSeason	2019-06-15	2019-08-31		
8	2019	MS1016	bathingSeason	2019-06-15	2019-08-31		
9	2019	MS1016	shortTermPollution	2019-07-18	2019-07-20	Malfunctioning sewage system resulted in water pollution.	
10	2019	MS1016	qualityChanges	2019-03-11	2019-05-13	Implementing UWWTD with construction of new UWWT plants	
11	2019	MS1019	delisted	2019-06-15	2019-08-31		
12							
13							
14							
15							
16							
17							
18							
14 -4 →	► Characterisation	SeasonalPeriod / MonitoringResult /	DO_NOT_DELETE_THIS_SHEET / 😓	/		[] <b>∢</b>	

**Definition:** start date (YYYY-MM-DD) of the seasonal period. For some period types if

the startDate is unknown or is yet undetermined, the conventional value

'9999-12-31' should be reported.

**Type:** date

\* The actual national data (including quality class) were changed manually for presentation purposes.

# **Dataset: seasonalPeriod - managementMeasures**

	А	В	С	D	Е	F	:	G
1	season	bathingWaterIdentifier	periodType	startDate	endDate	managementMeasures		Remarks
2	2019	MS1010	bathingSeason	2019-06-15	2019-08-31			
3	2019	MS1011	bathingSeason	2019-06-15	2019-08-31			
4	2019	MS1012	bathingSeason	2019-06-15	2019-08-31			
5	2019	MS1013	bathingSeason	2019-06-15	2019-08-31			
6	2019	MS1014	bathingSeason	2019-06-15	2019-08-31			
7	2019	MS1015	bathingSeason	2019-06-15	2019-08-31			
8	2019	MS1016	bathingSeason	2019-06-15	2019-08-31			
9	2019	MS1016	shortTermPollution	2019-07-18	2019-07-20	Malfunctioning sewage system resulted in w	ater pollution.	
10	2019	MS1016	qualityChanges	2019-03-11	2019-05-13	Implementing UWWTD with construction of	new UWWT plants	
11	2019	MS1019	delisted	2019-06-15	2019-08-31			
12								
13								
14								
15								
16								
17								
18								
14 4 1	▶ ▶   Characterisation	SeasonalPeriod MonitoringResult	DO_NOT_DELETE_THIS_SHEET 🦯 🐮	1/		[	III	

**Definition:** Description of significant management measures taken in the scope of reported seasonal

period. Additional information must be reported in the management Measures element for

all period types except 'bathingPeriod'.

**Type:** string, 0-5000 characters

European Environment Agency

<sup>\*</sup> The actual national data (including quality class) were changed manually for presentation purposes.

# **Dataset: monitoringResult**

	Α	В	С	D	Е	F	G	Н	1
1	season	bathingWaterIdentifier	sampleDate	intestinalEnterococciValue	escherichiaColiValue	sampleStatus	intestinalEnterococciStatus	escherichiaColiStatus	Remarks
2									
3									
4									
5									
6									
6 7									
8 9 10									
9									
10									
11									
12									
13									
11 12 13 14 15 16 17									
15									
16									
17									
18									
	· ▶I Characte	risation / SeasonalPeriod   Monitoring	Result DO NOT DEL	ETE THIS SHEET /	i		:	i	

# Dataset: monitoringResult -sampleDate

	Α	В	С	D	Е	F	G	Н	1
1	season	bathingWaterIdentifier	sampleDate	intestinalEnterococciValue	escherichiaColiValue	sampleStatus	intestinalEnterococciStatus	escherichiaColiStatus	Remarks
2	2019	MS1015	2019-06-04	675	15	preSeasonSample	confirmedValue		
3	2019	MS1015	2019-06-18	15	0			missingValue	
4	2019	MS1015	2019-07-09	15	15				
5	2019	MS1015	2019-07-30	15	15				
6	2019	MS1015	2019-08-20	15	15				
7	2019	MS1016	2019-06-04	30	30	preSeasonSample			
8	2019	MS1016	2019-06-18	346	197		confirmedValue		
9	2019	MS1016	2019-07-02	618	988	short Term Pollution Sample			
10	2019	MS1016	2019-07-04	15	15	confirmationSample			
11	2019	MS1016	2019-07-09	15	15	replacementSample			
12	2019	MS1016	2019-07-23	109	46				
13									
14									
15									
16									
17									
18									
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**Definition:** sampling date (YYYY-MM-DD).

**Type:** date



# **Dataset: monitoringResult – Measured concentrations**

	Α	В	С	D	Е	F	G	Н	
1	season	bathingWaterIdentifier	sampleDate	intestinalEnterococciValue	escherichiaColiValue	sampleStatus	intestinalEnterococciStatus	escherichiaColiStatus	Remarks
2	2019	MS1015	2019-06-04	675	15	preSeasonSample	confirmedValue		
3	2019	MS1015	2019-06-18	15	0			missingValue	
4	2019	MS1015	2019-07-09	15	15				
5	2019	MS1015	2019-07-30	15	15				
6	2019	MS1015	2019-08-20	15	15				
7	2019	MS1016	2019-06-04	30	30	preSeasonSample			
8	2019	MS1016	2019-06-18	346	197		confirmedValue		
9	2019	MS1016	2019-07-02	618	988	shortTermPollutionSample			
10	2019	MS1016	2019-07-04	15	15	confirmationSample			
11	2019	MS1016	2019-07-09	15	15	replacementSample			
12	2019	MS1016	2019-07-23	109	46				
13									
14									
15									
16									
17									
18									
14 4 ▶	▶I Characte	risation / SeasonalPeriod   Monitoring	Result DO_NOT_DELE	ETE_THIS_SHEET / 🖏 /		[] ∢			<b>•</b>

**Definition:** Measured concentration of bacteria per sample in "colony forming unit"

per 100 ml (cfu/100ml).

**Type:** integer



# **Dataset: monitoringResult - sampleStatus**

	Α	В	С	D	Е	F	G	Н	
1	season	bathingWaterIdentifier	sampleDate	intestinalEnterococciValue	escherichiaColiValue	sampleStatus	intestinalEnterococciStatus	escherichiaColiStatus	Remarks
2	2019	MS1015	2019-06-04	675	15	preSeasonSample	confirmedValue		
3	2019	MS1015	2019-06-18	15	C			missingValue	
4	2019	MS1015	2019-07-09	15	15				
5	2019	MS1015	2019-07-30	15	15				
6	2019	MS1015	2019-08-20	15	15				
7	2019	MS1016	2019-06-04	30	30	preSeasonSample			
8	2019	MS1016	2019-06-18	346	197	,	confirmedValue		
9	2019	MS1016	2019-07-02	618	988	shortTermPollutionSamp	е		
10	2019	MS1016	2019-07-04	15	15	confirmationSample			
11	2019	MS1016	2019-07-09	15	15	replacementSample			
12	2019	MS1016	2019-07-23	109	46				
13									
14									
15									
16									
17									
18									
14 -4 →	▶I Characte	risation / SeasonalPeriod   Monitoring	Result DO_NOT_DELE	ETE_THIS_SHEET / 😉 /		4			<b>—</b>

**Definition:** information regarding missing samples, STP, specific circumstances of

samples etc.

**Type:** string

**Codes:** • missingSample

• shortTermPollutionSample

• confirmationSample

• replacementSample

• preSeasonSample



# **Dataset: monitoringResult – information related to bacteria values**

	Α	В	С	D	Е	F	G	Н	1
1	season	bathingWaterIdentifier	sampleDate	intestinalEnterococciValue	escherichiaColiValue	sampleStatus	intestinalEnterococciStatus	escherichiaColiStatus	Remarks
2	2019	MS1015	2019-06-04	675	15	preSeasonSample	confirmedValue		
3	2019	MS1015	2019-06-18	15	0			missingValue	
4	2019	MS1015	2019-07-09	15	15				
5	2019	MS1015	2019-07-30	15	15				
6	2019	MS1015	2019-08-20	15	15				
7	2019	MS1016	2019-06-04	30	30	preSeasonSample			
8	2019	MS1016	2019-06-18	346	197		confirmedValue		
9	2019	MS1016	2019-07-02	618	988	shortTermPollutionSample			
10	2019	MS1016	2019-07-04	15	15	confirmationSample			
11	2019	MS1016	2019-07-09	15	15	replacementSample			
12	2019	MS1016	2019-07-23	109	46				
13									
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17									
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14 4 ≯	▶ Characte	risation / SeasonalPeriod Monitoring	Result DO_NOT_DEL	ETE_THIS_SHEET / 🖫 /		[] 4	·		<b>—</b>

**Definition:** information regarding specific bacteria value.

**Type:** string

**Codes:** • confirmedValue

• limitOfDetectionValue

• missingValue



# **Further information – Bathing water helpdesk**

### **EIONET**

Central Data Repository

You are here: Eionet» CDR» General Help» Bathing Water Directive

### Navigation

- Search by obligation
- Search XML files
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- Global worklist
- Notifications
- » Help

### **Account Services**

### I have

» lost my password

### **Bathing Water Directive**



→ Helpdesk

All enquiries can be directed to bwd.helpdesk@eionet.europa.eu

The following material is intended for national reporters of Bathing Water Directive data. It shows how to use Reportnet tools during the reporting process and how to improve the quality of deliveries. Reporting under the old data flow (ROD 531) and the new data flow (ROD 787 and 788) are described under respective subsections.

### BWD dataflow 787 and 788 (new reporting template)

This section covers composition and delivery of the dataset under the new BWD dataflow. Reporting of the monitoring data in this dataflow is registered under reporting obligation 787 and based on respective Data Dictionary. Reporting of the spatial identification data in this dataflow is registered under reporting obligation 788 and will be available in 2020.

- BWD Reporting Guidance ROD 787 composition of the dataset, description of tables and fields
- How to use Reportnet for BWD reporting ROD 787 tutorial for delivery of the dataset to the CDR
- Pre-filled reporting templates with transformed BWD 2018 data by country enter the national folder and download the file BW {countryCode} 2018.zip. The EEA uses a revised data model of the BWD database, to which all the legacy data were transformed. For reference and learning purposes, the dataset of the season 2018 by country was pre-filled to the new reporting template and is available at the linked "WISE restricted access area". The access to each national folder is limited to respective nominated national reporters for BWD.



# **Reportnet 3.0 – further information**

# Reportnet 3.0

Our approach to develop the modernised e-Reporting system for streamlining environmental reporting

In 2018, the EEA has initiated Reportnet 3.0 project to promote and modernise eReporting with the latest IT solutions. This modern reporting infrastructure will stepwise integrate data flows under the EU environmental legislation, take into account national capabilities and provide a platform that supports new types of data (e.g. Copernicus, citizen science) and data from an extended group of stakeholders. To achieve this initiative, the EEA is working closely with the nominated experts from the EEA Member Countries and the Commission Services (DG ENV, DG CLIMA, DG ENER and JRC).

Reportnet 3.0 will act as a central hub through which all e-Reporting activities handled by the EEA with Eionet and other partners will be performed.

The system stepwise replaces the current Reportnet system and is foreseen as a one-stop-shop for all involved stakeholders. It will effectively address the issues faced by the reporters so far and employ modern approaches in software development (i.e. with regards to security, scalability, architecture, interoperability, etc.). Reportnet 3.0 will be designed to work seamlessly across organisations and supports existing legal obligations (e.g. INSPIRE) and standards to assure the reuse and interoperability of data.

Reportnet 3.0 project is initiated in 2018 to be finalised at the end of 2020. The migration of the reported data will start during this time and continue together with further system development beyond the duration of this project.

# LOWER COSTS & REDUCED BURDEN ON INFORMATION PROVIDERS SIMPLER ENVIRONMENTAL REPORTING: WHAT DOES IT MEAN? ENHANCED MONITORING ON THE GROUND BETTER DATA & RESEARCH RESEARCH

### Reportnet 3.0 documents

**Business Vision** 

For the other public documents, please visit our project page.

### Newsletters

Issue 1 (January 2019)

Issue 2 (April 2019)

Issue 3 (July 2019)

Issue 4 (October 2019)

### Leaflet

Reportnet 3.0 Leaflet

**EEA** will in the coming months arrange a Webinar to demonstrate the Reportnet 3.0 functionality.

2020 Bathing Water can either be reported via Reportnet 2.0 (upload of files to CDR) or as a pilot test to Reportnet 3.0. Both reporting processes will use the BWD 2019 datamodel

https://www.eionet.europa.eu/reportnet/reportnet-3.0



# 2. Specific issues related to bathing water data reporting

Prohibited, inaccessible, and delisted bathing waters

Short Term Pollution events

Bathing waters in groups



# Issue: prohibited, inaccessible, and delisted bathing waters

- Bathing waters with disturbances in operation and management should be reported through different periods, namely: **bathingProhibition**, **inaccessible**, **delisted**.
- The term "closed" is not used any more!
- More than one period can be reported for describing the same situation/event.

periodType	Possible reasons	Connected to water quality	Still officially identified	<b>Duration of the period</b>
bathingProhibitio n	Short-term pollution, poor quality annual status, or expected pollution due to foreseen reasons	Yes	Yes	Temporary or permanent
inaccessible	Physical inaccessibility due to earthquake, eroded path, construction on the site; or legal reasons that impede bathing and monitoring	No	Yes	Temporary or permanent
delisted	Decreased number of bathers, implementation of protected area that does not allow bathing, long-term poor quality (more than four years)	Yes or no	No	Permanent - no identification planned for the future

# Issue: prohibited, inaccessible, and delisted bathing waters

• More than one period can be reported for describing the same situation/event.

### Sheet "seasonalPeriod":

	Α	В	С	D	E	F	G
1	season	bathingWaterIdentifier	periodType	startDate	endDate	managementMeasures	Remarks
2	2019	MS1016	bathingSeason	2019-06-15	2019-08-31		
3	2019	MS1016	bathingProhibition	2019-07-18	2019-07-20	Malfunctioning sewage system resulted in water pollution. System repaired in 36 hours.	
4	2019	MS1016	shortTermPollution	2019-07-18	2019-07-20	Malfunctioning sewage system resulted in water pollution. System repaired in 36 hours.	
5	2019	MS1017	bathingSeason	2019-06-15	2019-08-31		
6	2019	MS1017	bathingProhibition	2019-06-15	2019-08-31	Bathing prohibited for the whole season due to poor water quality.	
7	2019	MS1023	bathingSeason	2019-06-15	2019-08-31		
8	2019	MS1023	inaccessible	2019-08-11	2019-09-13	The site was fenced-off due to road reconstruction.	
9	2019	MS1055	delisted	2019-08-31	9999-12-31	Bathers not using the site any more due to popularity of another location.	
10							

# **Short-term pollution**

# **Short-term pollution:**

- SeasonalPeriod: One period reported
- monitoringResults: Three samples (Short Term Pollution sample, confirmation sample, replacement sample) to be reported

### Sheet "seasonalPeriod":

	Α	В	С	D	E	F	G
1	season	bathingWaterIdentifier	periodType	startDate	endDate	managementMeasures	Remarks
2	2019	MS1016	shortTermPollution	2019-07-02	2019-07-04	Malfunctioning sewage system resulted in water pollution.	

### Sheet "monitoringResult":

	Α	В	С	D	E	F	G	Н	I
1	season	bathingWaterIdentifier	sampleDate	intestinalEnterococciValue	escherichiaColiValue	sampleStatus	intestinalEnterococciStatus	escherichiaColiStatus	Remarks
2	2019	MS1016	2019-07-02	618	988	shortTermPollutionSample			
3	2019	MS1016	2019-07-04	15	15	confirmationSample			
4	2019	MS1016	2019-07-09	15	15	replacementSample			

# **Issue: bathing waters in groups**

# Do not replicate samples before reporting. Report only samples for the actual site of monitoring.

### Sheet "Characterisation":

	Α	В	С	D	E	F	G
1	season	bathingWaterIdentifier	groupIdentifier	qualityClass	geographicalConstraint	link	Remarks
2	2019	MS1018	MSG4	1		http://www.bathingwater.ms/profiles/ms1018.pdf	
3	2019	MS1019	MSG4	1		http://www.bathingwater.ms/profiles/ms1019.pdf	

### Sheet "SeasonalPeriod":

	Α	В	С	D	E	F	G
1	season	bathingWaterIdentifier	periodType	startDate	endDate	managementMeasures	Remarks
2	2019	MS1018	bathingSeason	2019-06-15	2019-08-31		
3	2019	MS1019	bathingSeason	2019-06-15	2019-08-31		

### **Sheet "MonitoringResult":**

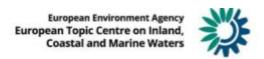
	Α	В	С	D	E	F	G	Н	
1	season	bathingWaterIdentifier	sampleDate	intestinalEnterococciValue	escherichiaColiValue	sampleStatus	intestinalEnterococciStatus	escherichiaColiStatus	Remarks
2	2019	MS1018	2019-06-04	20	15				
3	2019	MS1018	2019-06-18	15	15				
4	2019	MS1018	2019-07-09	15	15				
5	2019	MS1018	2019-07-30	15	15				
6	2019	MS1018	2019-08-20	15	15				

# 3. Assessment principles



# **Assessment procedures**

EEA/NSV/13/002 - ETC/ICM



# Guidelines for assessment under the Bathing Water Directive

Prepared by:

ETC/ICM (Lidija Globevnik, Luka Snoj, Gašper Šubelj), October 2019

### Contents

	1. Inti	ntroduction					
	2. Sele	ection of samples for assessment dataset					
	2.1.	Assessment dataset of grouped bathing waters					
	2.2.	Selection of short-term pollution samples					
3. Definition of statuses							
	3.1.	Monitoring calendar status					
	3.2.						
3.3. W		Water quality status10					
	3.3.	1. Minimum number of samples to execute assessment					
	3.3.	2. Status determination – calculation of percentiles1					

Link:



# **Assessment procedures**

Read <u>this document</u>, available at the CDR Help section:

https://cdr.eionet.europa.eu/help/BWD/

EEA/NSV/13/002 - ETC/ICM



# Guidelines for assessment under the Bathing Water Directive

Prepared by: ETC/ICM (Lidija Globeynik, Luka Snoj, Gašper Šubelj), October 2019

#### Contents

1.	Intr	roduction	4				
2.	Selection of samples for assessment dataset						
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3	3.2.	Management status					
		Water quality status					
	3.3.	Minimum number of samples to execute assessment	(				
		2. Status determination - calculation of percentiles					

3



### **Statuses**

# monitoring calendar status:

- 0 Not implemented
- 1 − Implemented

## management status:

- 1 Continuously monitored
- 2 Newly identified
- 3 Quality changes
- 4 Monitoring gap

# bathing water quality status:

- 0 − Not classified
- o 1 − Excellent
- 2 Good
- 3 Sufficient
- 4 Poor

# **Examples:**

"At the bathing water site 'Adriatic Sands East', the monitoring calendar was implemented in the season 2019. The bathing water has been 'newly identified' and cannot be quality-classified yet."

"At the bathing water site ,Adriatic Sands West', the monitoring calendar was not implemented in the season 2019. The bathing water has been continuously monitored and is classified ,excellent."



# **Sample selection**

- 1. Select assessment period
- 2. Select all samples in the assessment period
- 3. Disregard short-term pollution (STP) samples (if conditions met)
- 4. Disregard multiple pre-season samples and post-season samples