Guidance document on reporting under the Drinking Water Directive 98/83/EC

Information required to be submitted to the European Commission every three years under Article 13

Disclaimer:

This technical document has been developed by the work of a sub-group of the Art.12 Committee of the Drinking Water Directive, involving the Member States and the Commission. The document should be regarded as presenting an informal consensus position on best practice agreed by all partners. However, the document does not necessarily represent the official, formal position of any of the partners.

Introduction

On 17 January 2005, the Management Committee of the Drinking Water Directive agreed to develop an expert background paper with guidance on harmonised reporting methods and formats for the Drinking Water Directive and delegated this task to a Subgroup.

In 2007 the first version of the Guidance Document on reporting under the Drinking Water Directive 98/83/EC was presented as the outcome of the work of the Subgroup.

The 8th Committee of the Drinking Water Directive reached a consensus on this Guidance Document on 8 May 2007.

It has presented a new, table-oriented way of reporting, in line with the Drinking Water Directive and with the WISE approach for reporting (see chapter 1 – Principles).

The technical implementation started in 2007 with the aim of implementing these harmonised reporting methods and formats.

Following the Article 12 Committee Meeting from February 2011, the Subgroup on reporting was reconvened with the view to revise and update the Guidance Document on the basis of the experiences gained by the Member States.

The present document represents the updated version of the Guidance Document.

Draft proposal on reporting requirements and formats under Council Directive 98/83/EC on the quality of water intended for human consumption

Summary of the reporting requirements						
Topic	Article DWD	Status	Entry	Periodicity		
General information on drinking water supply arrangements		To be reported to the European Commission	Table 1	Updated every three years		
Information on exemptions and national parameters and parametric values ¹	Articles 3.2.a and 3.2.b Article 5.3	To be reported to the European Commission	Table 2	Updated every three years		
Information on drinking water analysis	Article 7.5.b	To be reported to the European Commission	Table 3A and 3B	Updated every three years		
Monitoring information on water supply zones	Article 7.2 (Annex II, Table A.1 and Table A.2,Table B1 and Table B1 note 4)	To be reported to the European Commission	Table 4	Annual return submitted every three years		
National summary information on drinking water quality in water supply zones	Article 5.2	To be reported to the European Commission	Table 5A and 5B	Annual return submitted every three years		
Information on non-compliant water in water supply zones		To be reported to the European Commission	Table 6	Annual return submitted every three years		
Format of drinking water quality information available	Article 13(1)	To be made available to consumers	Table 7	Updated as regular as possible and practicable		
Type of information available to the public	Article 13(1)	To be made available to consumers	Table 8	Updated as regular as possible and practicable		

Note Reporting Guidance on derogations is presented in a separate document

¹ Although in accordance with Article 13 on Reporting there is an obligation to report on additional national parameters and parametric values, it was assumed that MSs reported already on such parameters therefore providing this information under every reporting exercise was considered redundant.

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1 Principles

In line with current requirements for reporting and information exchange and the requirements of Article 13 of Council Directive 98/83/EC on the quality of water intended for human consumption (the Drinking Water Directive), the following principles will be applied to the establishment of procedures, formats and information requirements for reporting.

- (i) The report shall cover water intended for human consumption⁽¹⁾
- (ii) Reporting shall be kept as simple as possible.
- (iii) Reporting shall be in an electronic format.
- (iv) Data should be presented in an easily understandable format.
- (v) The amount of data to be submitted by Member States (MS) to the European Commission shall be the minimum necessary to demonstrate compliance with the Drinking Water Directive⁽²⁾.
- (vi) MS shall be responsible for reporting to the Commission. They shall aggregate regional or federal reports into a national report.
- (vii) MS shall be responsible for the accuracy of the data.
- (viii) In accordance with the requirements of Article 13(2) of the DWD, reporting to the Commission shall be carried out at three-yearly intervals (comprising of three separate annual reports) and applies, as a minimum, to all individual supplies of water exceeding 1000 m³ per day on average or serving more than 5000 persons⁽³⁾. Information on national websites shall be as current as practically possible.
- (ix) In the context of WISE⁽⁴⁾ a long term aim for MS will be to store information in national databases accessible through the internet which shall be harmonised to allow interrogation by the Commission to enable it to carry out its legal duties such as checking compliance with the requirements of the Drinking Water Directive (DWD) and produce a synthesis report.
- Water intended for human consumption shall mean all water either in its original state or after treatment:
 - intended for drinking, cooking, food preparation or other domestic purposes regardless of its
 origin and whether it is supplied from a distribution network or from a tanker, or in bottles or
 containers, and;
 - all water used in any food-production undertaking for the manufacture, processing, preservation or marketing of products or substances intended for human consumption unless the competent national authorities are satisfied that the quality of the water cannot affect the wholesomeness of the foodstuff in its finished form.
- This is qualified by the limitation of reporting duties to water supplies meeting the tresholds set out in Article 13.2.
- In the accompanying guidance notes an explanation is presented on the terms water supply zone and individual water supply.
- WISE (Water Information System for Europe), is the Common Reporting Strategy for water legislation which was defined through a concept paper, agreed between the Water Directors of the EU Member States, Norway, Bulgaria, Romania and the European Commission in November 2003.

PART 1

Information required to be submitted to the European Commission every three years under Article 13

2 Information required

- 2.1 This part concerns the information that is required to enable the Commission to have a picture of each MS general arrangements for drinking water supply. It is anticipated that three categories of general information will be required. These will each cover the whole three-year period:
 - (i) general information on MS drinking water supply arrangements. This information shall be in the format shown in Table 1:
 - (ii) information on exemptions. This information shall be in the format shown in Table 2; and
 - (iii) information on drinking water sampling and analysis methods. This information shall be in the format shown in Table 3A and 3B.
- 2.2 There are three categories of data which require annual returns submitted every three years. These data shall relate only to water supply zones where the supply of water exceeds 1000 m³ per day as an average **or** serving more than 5000 persons:
 - (i) monitoring information on water supply zones. This information shall be in the format shown in Table 4;
 - (ii) summary information on drinking water quality in water supply zones at a national level. This information shall be in the format shown in Tables 5A and 5B; and
 - (iii) Information on non-compliant water in water supply zones. This information shall be in the format shown in Table 6.
- 2.3 If MS wish to supply the Commission with data relating to water supply zones where the supply of water is less than 1000 m³ per day as an average and serving less than 5000 persons they should do so only in a completely separate report using the same principles and formats.
- 2.4 Article 13(1) requires that each MS shall take the measures necessary to ensure that adequate and up-to-date information on the quality of water intended for human consumption is available to consumers. It is recommended that this should be by means of a national database on drinking water quality accessible through the internet and /or other media (see Tables 7 and 8).
- 2.5 Member States are not required to report on parameters that are not in the Drinking Water Directive or on stricter national parameters i.e. where standards have been set at a tighter level than those in the Directive.
- 2.6 If the Member States wish to supply additional information (water quality in networks etc., additional or stricter parameters and all other information not required obligatory by the DWD) that shall be supplied additionally in the free form in the Word document files but provision of such information is not mandatory.

	e exception of question	Table 1 on Member States dri 1.2 only information on indiv	idual supplies of water	exceeding 1000 m ³ a day
1.1	as an averag	ge or serving more than 5000) persons should be re	ported)
1.2	Total population is	n millione (1)		
1.3	Number of water			
1.4	Water Supply Zo			
1.4	1.4.1	1.4.2	1.4.3	1.4.4
	Name of WSZ	NUTS coordinates of the WSZ ⁽²⁾	Resident population (3)	Volume of water supplied in m³/day
1.5	Total resident por (1.4.3) (4)	oulation supplied in		
1.6	Total volume of w (1.4.4) in million			
1.7	Water sources		% of total volume	5 (5)
1.7.1	Groundwater (6)			
1.7.2	Surface water (7)			
1.7.2.1	Inland water			
1.7.2.2	Coastal, transition	nal (brackish) water		
1.7.3	Bank filtration was	er		
1.7.4	Artificial groundwa	ater recharge		
1.7.5	Rainwater			
1.7.6	Other sources			
1.8	National databas	se on drinking water q	uality	
1.8.1	Website address the database	for public access to		
1.9	Member State co	ontact		
1.9.1	Responsible Auth	ority		
1.9.2	Name			
1.9.3	Address			
1.9.4	Telephone			
1.9.5	Fax			
1.9.6	E-mail			

Notes	
(1)	Total population in the MS in 1.2 should be reported in millions up to three decimal places.
(2)	Whether Nuts codes that are touched by the WSZ or GIS information can be used as coordinates will be specified later in agreement with the WISE working group. There is no need to draw WSZ along administrative borders
(3)	Populations in 1.4.3 and 1.5 should be reported as whole numbers and not be abbreviated to a decimal.
(4)	The resident population in a MS is defined as the population that normally resides in the MS. However, in some MS the total population reported in 1.5 can exceed the total population in the MS in 1.2 where there is a significant tourist population.
(5)	In the case of a mixture of water from different sources allocate to the various categories
(6)	Groundwater means all water which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.
(7)	Surface water means inland waters, except groundwater; transitional waters and coastal waters (Water Framework Directive 2000/60/EC Art 2.1).

Information on exemptions in accordance with Articles 3.2.a and 3.2.b of the DWD Units used should be the same as in the DWD 2.1 Describe water exempted from the requirements of the Drinking Water Directive (see Article 3.2 DWD) (1) Water exempted Comments Notes (1) Water can be exempted because of size of the water supply zone (e.g. < 10 m³/day or serving less than 50 people) or because of the purpose it is intended for.

Note: Although the scope of the reporting covers water supply systems above $1000 \text{ m}^3/\text{day}~$ - this does not apply when providing information as requested by Article 3(2), for which you have to refer to both possible situations of exemption - Article 3(2) a. and b.

Reporting has an exception - the situations when the MSs may exempt certain waters from the provisions of the Directive (Article 3 (2)).

	Tabl	e 3 A			
Infor	mation on drinking water alternative	ve analysis methods for microbiological			
		Article 7.5.b DWD ⁽¹⁾			
Parameter Method					
Notes					
(1)	be demonstrated that the results obtained are at I MS which have recourse to alternative methods s	specified in Annex III, Part 1, may be used, providing it can east as reliable as those produced by the methods specified. shall provide the Commission with all relevant information This table should contain only the parameter and method			

Table 3 B Sampling	Table 3 B Sampling methods used for compliance sampling for microbiological parameters and for metals						
Parameter	Random Daytime ⁽¹⁾	Stagnation ⁽²⁾	Fully flushed ⁽³⁾	Sample point disinfected (5)			
E.coli							
Enterococci							
Cl.perfringens ⁽⁴⁾							
Coliform bacteria							
Colony Counts 22°C							
Metals e.g. Pb, Cu, Ni							
Notes:							
(1)	RDT is where the sample is taken directly from the tap normally used for drinking without flushing the tap. The sample is taken at a random time during the day and once the sampler enters the sample location he/she takes the first litre of water from						

	the tap.
(2)	This is where the water is allowed to stagnate in the pipes for a set period prior to sampling. The water is fully flushed prior to the stagnation period. In general this period should be at least 30 minutes but may be longer.
(3)	This is where the water is fully flushed (run to waste) prior to sampling.
(4)	MS that also measure <i>Clostridium perfringens</i> ex waterworks should also give this information as a note to this table.
(5)	Disinfection of the tap before collecting the water sample.

Note A: Information provided under this table will not be used by the COM in assessing compliance with the Drinking Water Directive.

Note B: The boxes should be ticked where appropriate

Table 4 Annual monitoring in water supply zones that do not meet the minimum monitoring frequency in the DWD (1)

This table should only include WSZs in which some or all parameters do not comply with the monitoring frequency in the DWD or that do not comply with the reduced monitoring frequency in the DWD. The Commission may decide however to ask for additional information on a later stage, depending on the situation.

Year			
Name WSZ	Parameter	Number of analyses	Number of analyses
	concerned	Number of analyses required ⁽¹⁾	done
Notes			
(1)	The number of analyses requir with the DWD.	ed should take account of all allowance	s for reduction in accordance

Table 5A National summary information on drinking water quality in water supply zones exceeding 1000 m³ per day as an average or serving more than 5000 persons Member **State** Year Sampling (2) Parameter (1) Numbers of Numbers Numbers. Numbers of % of WSZ of WSZ with Analyses location 7 **Analyses** of Monitored Non-**Analyses** not Complying Compliance Complying Microbiological Parameters Escherichia coli (E.coli) Enterococci **Chemical Parameters** Antimony Arsenic Benzene Benzo(a)pyrene Boron Bromate Cadmium Chromium Copper Cyanide 1,2-dichloroethane Fluoride Lead Mercury Nickel Nitrate Nitrite ex water works Nitrite in distribution at the tap Nitrate/nitrite formula3 Pesticides - Total Polycyclic Aromatic Hydrocarbons Selenium Tetrachloroethene and Trichloroethene Trihalomethanes -Total Draft shortlist of selected individual pesticides⁴ Desethylatrazine

		T		T	T	
CAS 6190-65-4						
Atrazine						
CAS 1912-24-9						
Terbutylatrazine						
CAS 5915-41-3						
Bentazon						
CAS25057-89-0						
2,6-						
dichlorbenzamide						
CAS 2008-58-4						
Metalochlor						
CAS 87392-12-9						
2.4 D						
CAS 94-75-7						
Simazine						
CAS 122-34-9 Diuron						
CAS 330-54-1 MCPA						
CAS 94-74-6						
Bromacil						
CAS 314-40-9						
Mecoprop						
CAS 7085-19-0						
Isoproturon						
CAS <u>34123-59-6</u>						
C110 <u>5-1125-59-0</u>		Indicat	or Paramet	tore	<u> </u>	<u> </u>
Aluminium		illulcat	or Faraillei	1019		
Ammonium						
Chloride						
Clostridium						
perfringens						
Conductivity						
Hydrogen Ion						
Concentration						
Iron					<u> </u>	
Manganese						
Oxidisability						
Sulphate						
· ·						
Sodium						
Coliform bacteria						
Tritium						
Total Indicative						
Dose						
Indica	tor Parame	ers with no	numerical v	alue specifi	ed in the DW	/D⁵
Colour				•		
Odour						
Taste						
Colony count 22 ⁰ C						
Total organic						
carbon (TOC)						
Turbidity						
			i			

- (1) See table 5 B for the product specified parameters Acrylamide, Epichlorohydrin and Vinylchloride
- Please use codes 'W' for waterworks, 'N' for network, 'L' for legal point of delivery and 'T' for tap in domestic installations. It is possible to enter more than one code if different sample locations are used. The sampling location may refer as well to Annex II, table B1, sub-header.
- (3) DWD Annex 1 Part B Note 5
- (4) MS are asked to report on the monitoring effort and analytical results on a shortlist of pesticides. The draft shortlist has been compiled on the basis of previous reports from the MS to the EC on pesticides, derogations and non-compliance. Table 6 asks for all pesticides that MS report as (non)-compliant in WSZs. The shortlist will be subject to a rolling revision. It is noted that not all pesticides will be monitored by each MS as some of these pesticides will not be a risk to water supplies in these MSs,
- (5) For the parameters that have no numerical value in the DWD (colour, odour, taste, CC22, TOC and turbidity) MS are asked to give an indication of the level of (non)-compliance with national standards. As national standards and national perception of these water quality parameters are likely to differ between MS, no attempt will be made to make comparisons at EU level.

Information gi	Table 5B iven on product specified parameters Acrylamide, Epichlorohydrin and Vinylchloride (1.2)
Parameter	Text explaining how the Drinking Water directive provision is fulfilled
Acrylamide	
Epichlorohydrin	
Vinylchloride	

- (1) In the accompanying Guidance Notes an explanation is given on the product specified parameters Acrylamide, Epichlorohydrin and Vinylchloride
- if analysis of drinking water for acrylamide, epichlorohydrin or vinylchloride has been carried out this should be stated in this table.

Table 5C Further optional comments from the Member State relating to table 5A						

Table 6 Information on non-compliance of drinking water in water supply zones
Please note that in this table all individual pesticides that are non-compliant in a WSZ have to be reported on and not only the shortlisted pesticides in table 5A

Member State:

Year:									_	
Water supply zone	Parameter	MS derogation reference	Total No. of analyses	Number of non- compliances (NC) ^{1,2}	Max 3	Med Tot al ⁽⁴⁾	Med Non- Complia nt ⁽⁵⁾	Cause of the NC (code) ⁶⁻⁹	Remedial action⁵ (code)	Time-table ⁶ (S,M,L, I)
										_

Notes	
(1)	All results non-compliant with DWD parametric values should be reported including those covered by a derogation.
(2)	Applies to all Annex I Part A, B and C parameters and their compliance with the parametric values set down in the Drinking Water Directive.
(3)	Values given should be the maximum value reported of the specific parameter in the WSZ
(4)	Median value of all the analysis performed.
(5)	Median value of non-compliant analysis.
(6)	Codes to be used for cause of the NC are given in Annex A
(7)	Codes to be used for remedial actions are given in Annex B. Multiple codes can be entered where this is appropriate.
(8)	Codes to be used for the timeframe of corrective action are given in Annex C. Multiple timetables can be entered where there are multiple remedial actions with different timetables.
(9)	Where the same parameter has been reported as a non-compliance on more than one occasion in a water supply zone and the non-compliances do not have the same cause/remedial action/timeframe they should be group according to their cause and reported on separated lines.

Part 2
Reporting on drinking water quality to the public

Table 7				
Format of drinking water quality information available Format Yes/No Location of Information ¹				
Format	res/No	Location of information		
7.1 Website				
7.2 Annual Report (National)				
7.3 Annual Report (Regional)				
7.4 Triennial report (National)				
7.5 Information Leaflets				
7.6 Newsletters				
7.7 Water Bills ²				
7.8 Public Meetings				
7.9 Local Newspapers				
7.10 Publicly Accessible Files ³				
7.11 Others				
Matan				

Notes:

- (1) The location should be the point where the Commission can contact to obtain the types of information listed.
- (2) Information on Drinking Water Quality is included in the water bills sent to customers
- (3) This means files that are held by the water supplier, local council or government agency or department that any member of the public may inspect during office hours

Table 8				
Type of Information available to the public				
Type of Information Available	Yes/No	Location of Information ¹		
8.1 National summary of compliance				
8.2 Regional summary of compliance				
8.3 WSZ summary of compliance				
8.4 Individual WSZ monitoring results ²				
8.5 Monitoring results for small supplies				
(supplying 10 -1000 m ³ /day as an				
average or serving 50 -5000 persons)				
8.6 Monitoring results for very small				
supplies (supplying less than 10 m ³ /day				
on average or serving <50 persons)				
8.7 Compliance with stricter National				
Standards				
8.8 Compliance with additional National				
Standards				
8.9 Non-compliant results at WSZ level ³				
8.10 Source of the water supply at WSZ				
level				
8.11 Others				
Notes	•	•		

Notes:

- (1) This should be one or more of the alternatives listed in Table 7
- (2) This means monitoring results on the individual analyses in water supply zones that members of the public can access.
- (3) This means non-compliant monitoring results on individual analyses in water supply zones that members of the public can access.

ANNEXES

Annex A: Coding system for the causes of non-compliance

Code	Cause
С	Catchment related
T	Treatment Plant related
Р	Public Distribution Network related
D	Domestic Distribution System related
0	Other Cause
S	Combined Causes
U	Unknown Cause

Annex B: Coding system for Remedial actions in case of non-compliance

CODE	Description of remedial action		
C for catchment related			
C1	Action(s) to terminate or mitigate the cause		
C2	Action(s) to replace source		
T for treatment related			
Т	Establishing, upgrading or improving treatment		
P for public distribution network related			
P1	Replacement, disconnection or repair of defective		
	components		
P2	Cleaning, scouring and/or disinfecting contaminated		
	components		
D for domestic distribution system ² :			
D1	Replacement, disconnection or repair of defective		
	components		
D2	Cleaning, scouring and/or disinfecting contaminated		
	components		
S for Security measures to	prevent unauthorised access		
S1	Security measures to prevent unauthorised access		
O for Others			
E for Emergency actions for the consumers' health and safety			
E1	Notification of and instructions to consumers for example,		
	prohibition of use, boil water order, temporary limitations on		
	consumption).		
E2	Provision of a temporary alternative drinking water supply		
	(for example, bottled water, water in containers, tankers)		
N for None Required			

More than one of the above codes may apply

² Including domestic installations where water is served to the public

Annex C: Coding for the timeframe of corrective actions

Code	Timeframe
	Immediate i.e. not more than 1 day
S	Short-term, i.e. not more than 30 days
M	Medium-term, i.e. more than 30 days but not more than a year
L	Long-term, i.e. more than a year

Annex D: Guidance Notes

D.1 Introduction and Guidance to Part 1 – Information to be submitted to the EC under Article 13

- D1.1 For the purpose of reporting "a given water supply" Article 9(5) and an "individual supply of water" Articles 9(7) and 13(2) should be taken as referring to a Water Supply Zone as defined in Note 1 to Table B1 in Annex II of the Directive. Domestic installation means in-house installations, also in the case water is served to the public.
- D 1.2 Tables 3, 4, 5 and 6 apply only to the parameters listed in Annex I of the Directive. Information on additional national parameters and additional national indicator parameters should not be included, but referred to in the information made available by Member States for consumers (see tables 7 and 8).
- D 1.3 Table 4 provides information on the minimum number of analyses required and the number of analysis that have actually been carried out. The number of analyses necessary to meet the requirements are stated by the Directive in Annex II, Table A.1(including footnote 1,2,3), A.2 and Table B.1 note 4 (including footnote 2,3,4).

In Table 4 the minimum number of analyses should take into account the requirements of Table A, Annex II, that the check monitoring frequency for some parameters is required only under specified circumstances (see Notes 8,9 and 10 of Part C Annex I) and the advice in Notes 2, 4 and 6 of Part C Annex 1 of the Directive.

Any additional monitoring required to comply with an Article 9 derogation must not enter into the count for reaching the minimum number of analyses required to meet the requirements of Table B1 in Annex II of the Directive.

- D 1.4 In Table 5 only individual pesticides in the agreed shortlist have to be reported. The shortlist of individual pesticides has been produced on the basis of previous reporting reports from the MS to the EC. The shortlist is subject to a rolling revision.
- D 1.5 In Table 5, the following indicator parameters do not have a numerical value specified in Part C, Annex I of the Directive: colour, odour, taste, colony count 22°C, total organic carbon and turbidity (subject to Note 7 of Part C). Member States are requested to provide information on (non)-compliance of these parameters against national values.
- D 1.6 According to Note 1, Part B, Annex I, DWD, the product related parameters Acrylamide, Epichlorohydrin and Vinylchloride don't have to be analysed in the water, but the parametric value must be calculated according to product specification of the corresponding polymer in contact with the water. The report to the Commission should include an explanation in text format in table 5B, how this provision of the DWD was fulfilled by the MS. It is possible that the product specified parameters are actually analysed in (some) Member States. If this is the case this should be reported in Table 5B.

- D 1.7 In order to make the report conform to the WISE approach, the coordinates of the WSZ must be reported. It will be determined later together with the WISE working group, whether NUTS or GIS codes must be supplied.
- D 1.8 With respect to Tables 5 and 6, it is for the Member State competent authority to verify the quality of an analytical result. Member States must ensure that sampling and analysis is carried out in accordance with best practice.

D.2Introduction and Guidance to Part 2 – Information on Drinking Water Quality for the Public.

- D 2.1 Article 13(1) requires Member States to take the measures necessary to ensure that adequate and up-to-date information on the quality of water intended for human consumption is available to consumers.
- D 2.2 The Commission wishes to know if Member States are providing up-to-date information in addition to the three-yearly reports required by Article 13(2). It is expected that this will be mainly through national websites but recognises that other forms of information may be used and are valid forms of communication.
- D 3.3 The national information for consumers can for example include details of compliance against national parameters and national standards and compliance for all small water supplies.
- D 3.4 Table 7 and 8 contain details of the information Member States should provide to the Commission. This form should be submitted to the Commission every three years in accord with Article 13(2).