

Specific contract No. 07.0307/2013/SFRA/669101/ENV.C.2
implementing Framework Service Contract No. ENV.D.2/FRA/2012/0013

UWWTD legal compliance assessment methodology document

Final
20 June 2014

Date: 20 June 2014
Authors: Ms Edith Hödl-Kreuzbauer, Ms Katharina Lenz, Ms Christiane Stork (UBA)
Contract Manager: Ms Edith Hödl-Kreuzbauer (UBA)

The contents of this document are subject to copyright and all rights are reserved. No part of this document may be reproduced, stored in a retrieval system or transmitted, in any form or by any means electronic, mechanical, photocopying, recording or otherwise, without the prior written consent of the copyright owner.

This document has been produced by Umweltbundesamt GmbH.

Table of Contents

1	INTRODUCTION AND OBJECTIVES	1
2	RATIONALE	1
3	PROCESS	2
4	GENERAL PRINCIPLES – ASSESSMENT OF COMPLIANCE	5
4.1	COMPLIANCE WITH ARTICLE 3 (COLLECTION).....	6
4.2	COMPLIANCE WITH ARTICLE 4 (SECONDARY TREATMENT)	6
4.3	COMPLIANCE WITH ARTICLE 5 (MORE STRINGENT TREATMENT)	7
4.4	APPLICATION OF INDIVIDUAL APPROPRIATE SYSTEMS (IAS) FOR WASTE WATER TREATMENT (ARTICLE 3)	8
4.5	HISTORICAL ASSESSMENT OF DATE OF/CRITERIA FOR THE DESIGNATION/REVIEW OF SA AND CSA (ARTICLE 5)	8
4.6	COMPLIANCE IN SPECIFIC CASES.....	9
4.7	RATE OF COMPLIANCE OF WASTE WATER TREATMENT PLANTS	10
5	GENERAL PRINCIPLES – PRESENTATION OF WASTE WATER INSTALLATIONS IN PLACE	11
5.1	DIFFERENCES BETWEEN COMPLIANCE AND WASTE WATER TREATMENT INSTALLATIONS IN PLACE	11
5.2	DISTANCE TO FULL COMPLIANCE	12
5.3	STATUS OF WASTE WATER TREATMENT INSTALLATIONS IN BIG CITIES	12
6	FREQUENTLY ASKED QUESTIONS AND ANSWERS	13

1 Introduction and objectives

The document aims at providing background information regarding the rationale of Article 15 UWWTD reporting (section 2) and its processes to regularly inform citizens in bi-annual “UWWTD Implementation Reports (Synthesis Reports)” about the status of waste water treatment in their respective EU-MSs (section 3).

The main target of the document is to clearly describe the general principles and rules which are used to assess reported data for compliance with the requirements of the Directive (“methodology”) as described in section 4. For those EU-MS not yet being due to (full) compliance with the Directive (transition periods on-going), section 5 explains how information on waste water installations in place are presented to the public.

A frequently asked questions and answers section summarising most relevant enquiries of previous UWWTD reporting cycles complements this document (section 6).

2 Rationale

The UWWTD concerns the collection, treatment and discharge of urban waste water and the treatment and discharge of waste water from certain industrial sectors. Its objective is to protect the environment from the adverse effects of the above-mentioned waste water discharges.¹ Due to the high investment needs to implement the requirements of the Directive, a full implementation is considered as a challenging task. However, significant progress has been made over the past years and a positive trend with increased compliance rates is noticed.²

In order to facilitate the communication of information on the implementation of the Directive to the public and the collection of information, the Commission ensures a regular publication of Implementation Reports, based on the obligations in the UWWTD requiring EU-MS to monitor data and inform the Commission. Reporting is at the heart of knowledge and good implementation, and it is crucial to design and implement the reporting processes in a structured and progressive approach. The overall objective of reporting is that information and data provided by EU-MS are processed and synthesized to provide the best possible information to the EU-MS and the public as well as the Council and the European Parliament.

Article 15 UWWTD requires EU-MS to collect monitoring data and to make it available to the Commission within 6 months of receipt of a request. Since 2007, a biannual data collection is organised via a standardised approach and with the help of an electronic Questionnaire including parameters and data jointly developed by the Commission, the European Environment Agency and EU-MS being in line with reporting principles under the Water Information System for Europe (WISE)³. EU-MS have put significant efforts in the reporting exercise under Article 15, in

¹ Article 1 of the Directive. More information about the Directive can be found under the following webpage: http://ec.europa.eu/environment/water/water-urbanwaste/index_en.html.

² See the Conclusions of the 7th Implementation Report (section 1.4). To be downloaded from http://ec.europa.eu/environment/water/water-urbanwaste/implementation/implementationreports_en.htm.

³ For more information please visit <http://water.europa.eu/>.

particular regarding their national reporting systems and the use of new reporting formats. Consequently, the quality of reported data has significantly improved over the past years.⁴

Data reported via the electronic Questionnaire is being used to

- Check legal transposition, compliance and assess the state of implementation of the Directive;
- Compile statistics and to inform the European Parliament; and
- Create a European-wide picture to inform the public.

Results of the assessments and compiled information are presented in the “UWWTD Implementation Report (Synthesis Report)” which is published by the Commission every two years. An EU-wide database is compiled with the data sets provided by EU-MS⁵. Reported information is additionally made publicly available and visualised in the WISE data viewer⁶ and map viewer⁷.

The applied methodology for the compliance assessment (practices, procedures and rules) used to assess the information on collection and waste water treatment reported by EU-MS is described in section 4 of this document. For those EU-MS not yet being due to (full) compliance with the Directive (transition periods on-going), section 5 explains how information on waste water installations in place are presented in the Report.

The reporting system to assess compliance with the Directive and to present information on waste water treatment in EU-MS in the regular reports to the public is overall well established and operational and recognised as one of the most efficient reporting exercises. However, a number of deficiencies have been identified in the current reporting system and related information management, such as long delays in processing and updating information, the existence of parallel information flows or difficulties for the general public in accessing the information on the implementation status of the Directive. That is the reason why the Commission intends to address these shortcomings through the development and implementation of a new, future concept for the reporting, processing and assessment of data on the implementation of the Directive, making use of a "Structured Information and Implementation Framework" (SIIF).

3 Process

According to Article 15 of the Directive EU-MS have the obligation to monitor their waste waters and make available to the Commission the information collected, within 6 months of being requested. Referring to Article 15 of the UWWTD as well as Article 4 of the Treaty on the

⁴ While the first six “UWWTD Implementation (Synthesis) reports” were not including all EU-MS due to missing data for several EU-MS, the seventh report covered for the first time all EU-27 MS: http://ec.europa.eu/environment/water/water-urbanwaste/implementation/implementationreports_en.htm.

⁵ For more information please visit <http://www.eea.europa.eu/data-and-maps/uwwtd/uwwtd-data-sources/uwwtd-data-sources>.

⁶ For more information please visit <http://www.eea.europa.eu/data-and-maps/uwwtd>.

⁷ For more information please visit <http://www.eea.europa.eu/data-and-maps/uwwtd/interactive-maps/urban-waste-water-treatment-maps>.

European Union, the Commission launches (approximately) every two years a request⁸ for information in order to have an overview of implementation of the UWWTD across the entire European Union territory. EU-MS are asked to provide data covering the core elements of the Directive:

- Inventory and geo-referenced information on designated sensitive areas and their catchments (including designated less sensitive areas, if any);
- Information at agglomeration level covering waste water collection, treatment level and performance for all agglomerations for which the deadlines of the directive and the Accession Treaties have expired;
- Aggregated information at Member State level on waste water reuse and sewage sludge management.

The reference year for which data are requested are either from the previous or two years before the year in which the request for data is launched. Within the current UWWTD reporting exercise, although the data request could cover the reference years 2012 or 2011, EU-MS have been requested to provide data from 2012 in order to provide a more updated picture of the waste water situation. That way, only for duly justified reasons, data from 2011 would be accepted. Reducing the choice to just one reference date will ensure the consistency of the information at EU level, which will result in better information to the public.

In practical terms, the reporting is carried out by filling in the electronic Questionnaire as well as uploading data into WISE, via the Central Data Repository⁹ (ReportNet facilities, which are the European Environment Agency's electronic infrastructure for data collection). During the process of uploading the data to WISE, the quality of datasets is automatically checked, and an updated version of the dataset is produced. Upon receipt of the written request by the Commission, EU-MS have six months' time to deliver a final quality checked dataset to the Central Data Repository.

The final quality checked dataset is additionally being quality assessed by EEA (in cooperation with ETC-ICM) before finalised QA/QC¹⁰ EU-MS raw datasets are being included in the UWWTD Production Database which is used for the legal compliance check.

The assessment of legal compliance of reported data under Article 15 UWWTD is carried out based on legal criteria developed by the Commission. The applied methodology for the legal compliance assessment is the group of practices, procedures and rules used to assess the information on collection and waste water treatment reported by EU-MS. There are a number of different documents supporting the reporting process¹¹. In order to enhance awareness and transparency on the compliance assessment process, section 4 includes the main rules and procedures applied for the legal assessment for data provided under Article 15 UWWTD. A

⁸ Requests are sent out by letter, signed by the Director General of DG ENV.

⁹ For more information please visit <https://www.eionet.europa.eu/reportnet>.

¹⁰ The Quality Assurance (QA)/Quality Control (QC) procedure consists of the following steps: a) automated data validation in the web tool, b) manual in-depth check of tabular data (coordinates, incoming/discharged load data, implementation deadlines) and spatial data (coordinates, topology) and c) an automated data validation in the Central Data Repository (CDR) of the European Environment Agency. The use of the web tool is not mandatory and therefore some EU-MS upload their datasets (after internal validation) directly in the CDR. The QA run in the web tool is based on a series of automated "Structured Query Language" (SQL) scripts that check the data completeness and format and technical completeness and plausibility (description of the rules is available via the following link [UWWTD QA scripts](#)).

¹¹ http://forum.eionet.europa.eu/x_wise-reporting/library/treatment_directive/uuwtd-data-request-2013/

distinction between the assessment of the compliance status (for those EU-MS being fully or partly due to compliance) and the description of the waste water installations in place (for those EU-MS being not yet due to compliance) is required. Section 4 and section 5 of this document pay particular attention to highlight the differences in these two different assessment lines.

The legal compliance assessment of data is being processed by the Commission (with the support of external consultants) and data are presented in the so called “registers” (excel documents).

These registers include several sheets describing:

- General as well as compliance information on agglomerations: regions, name and code, generated load (p.e.) and the deadline for compliance with the Directive, information about the collection, secondary and more stringent treatment, compliance results for Article 3, 4 and 5 of the Directive as well as information about the receiving area and resulting treatment requirements, e.g. normal or sensitive area
- A list of agglomerations being in breach with the Directive (Article 3, 4 and 5), and other details of the breach
- A list of sensitive areas/catchment of sensitive areas and/or Article 5(4) areas and other details (date of designation, criterion etc.)
- A list of big cities including information regarding generated load (p.e.), best provided treatment of the generated load collected in collecting system as well as the receiving area
- Summary tables related to legal compliance and installations in place

The Commission summarises the outcome of the compliance assessment in the biannually published “UWWTD Implementation Report (Synthesis Report).” In-depth information for each EU-MS (also known as “national report”) is presented in the respective Annexes. The Synthesis Report includes information about relevant obligations, the implementation of the Directive in the reported period, compliance assessment for Articles 3, 4 and 5 and comparative assessments, as well as the temporal evolution of implementation and compliance rates. For those EU-MS, which are not yet due to (full) compliance, the status of urban waste water infrastructure and treatment is described. General but also in-depth information for each EU-MS (“national reports”) is sent to the respective competent National Authorities for comments and agreement before being published on the website of DG ENV.¹²

Additionally, the EEA ensures the dissemination of this information through an interactive map, intended to enable a more attractive, easy and targeted search of information, focusing on concrete data and locations. Some EU-MS have developed their websites to disseminate relevant information at national level.¹³

¹² All “UWWTD Implementation (Synthesis) Reports” can be downloaded from the following webpage:
http://ec.europa.eu/environment/water/water-urbanwaste/implementation/implementationreports_en.htm.

¹³ For more information regarding national websites please see document “Toward a new information system SIIF (Structured Implementation and Information Framework). Current situation of information management. Annex C. Final version as of 10 January 2014”, to be downloaded from CIRCABC (https://circabc.europa.eu/sd/a/952f0ea3-9318-4468-8f47-bec2368b4fe2/UWWTD_SIIF1_CS_Annex_C_national_websites_final.pdf).

4 General principles – assessment of compliance

For agglomerations with 2,000 p.e. or more in all EU-MS having joined the EU before the year 2004, the final deadline for implementation of the Directive expired on 31 December 2005. For those EU-MS joining the European Union after the year 2004, several transitional periods were negotiated in the Accession Treaties¹⁴ with different deadlines; some of them not expired yet. Sections 4.1, 4.2 and 4.3 provide information regarding the requirements and deadlines/transitional periods to be respected by EU-MS.

The legal compliance assessment of data reported through the electronic Questionnaires enquires whether the Directive (Article 3, 4 and 5) is correctly implemented in EU-MS. To this end, the parameters described below are taken into consideration:

- size of the agglomeration (p.e.)
- deadline to comply with UWWTD/ transitional period for this agglomeration
- type of receiving area (e.g. normal area, sensitive area)
- date of designation/review of the receiving area
- type of receiving water (e.g. freshwater, coastal water)

The legal compliance check follows a hierarchical approach, following case-law of the European Court of Justice.¹⁵ This means that non-compliance with obligations as regards collection (Article 3) entails non-compliance with the obligations to provide treatment (Articles 4 and, when applicable, 5), even if the quality standards of the effluents meet requirements of Tables 1 and 2 of Annex I of the Directive. Similarly, an agglomeration which does not meet the quality standards for secondary treatment (Table 1) cannot be deemed to comply with Article 5 (tertiary treatment, Table 2).

The legal compliance assessment has until now been carried out at agglomeration's level. As a result, agglomerations are or are not "compliant," but partial compliance of an agglomeration has not been considered. Moreover, compliance at other levels, such as compliance of a treatment plant, has not been an option in the compliance assessment until now.

An agglomeration is compliant when the entirety of its load is in compliance with Articles 3, 4 and 5 (if applicable), applying the hierarchical approach; however, in practical terms there are many situation of "almost" full compliance (load in compliance very close to 100%, or just a small amount of p.e. in non-compliance). In these cases, the Commission allows a certain margin of flexibility to consider agglomerations as fully compliant, a margin which follows clear rules which are described in the following sections.

As the application of individual or other appropriate systems (IAS) for waste water treatment according to Article 3 and the designation (date and criteria) of sensitive areas (SA) and catchment areas of sensitive areas (CSA) according to Article 5 are of particular relevance for the Commission, two separate sub-sections (4.4 and 4.5) provide detailed background information highlighting the principles of the respective compliance assessment. Sub-section 4.6 refers to compliance in specific cases.

Following a recent judgment of the European Court of Justice (November 2013), an additional focus on complying results in UWWTPs will be included in the compliance assessment. Although

¹⁴ The current list of transitional deadlines for complying with the UWWTD can be found here: http://ec.europa.eu/environment/water/water-urbanwaste/legislation/pdf/transitional_periods_eu10_eu2.pdf.

¹⁵ Commission versus Greece C-440/06, paragraph 25 (referring to Spanish case which set this precedent).

the legal compliance assessment is done at agglomeration's level, the situation of treated waste water (load treated) in each urban waste water treatment plant (treatment level, treatment performance) *as per* agglomeration will also be highlighted in order to show a more realistic picture of the situation of waste water load which is adequately treated in each agglomeration. More details are provided in sub-section 4.7. The Commission is also considering to present in the Implementation Report the amount of load in agglomerations, which meets relevant provisions in Articles 3, 4 or 5, despite the fact that agglomerations are compliant or not. This approach will be fully developed during the 8th UWWTD reporting exercise.

4.1 Compliance with Article 3 (collection)

Article 3 requires that all agglomerations equal or larger than 2,000 p.e. are provided with collecting systems for urban wastewater, which have to meet the requirements laid down in Annex I.A. However, where the establishment of a collecting system is not justified either because it would produce no environmental benefit or because it would involve excessive cost, individual systems or other appropriate systems (IAS) which achieve the same level of environmental protection shall be used. In specific cases (e.g. in arid areas like Cyprus) it can also be an adequate solution to collect 100% of the generated load of an agglomeration in IAS (cesspools) and transport the wastewater to an UWWTP by truck. For this reason the use of IAS cannot be considered as a criterion against compliance and is hence considered as 'compliance-neutral'. In cases where the fraction of the generated load addressed through IAS is very high without any justification provided by the EU-MS, the Commission may come back to EU-MS for further clarification.

The assessment of compliance with requirements of Article 3 is processed as follows:

- In case the UWWTD deadline (or transitional period) had not expired by the reference date of UWWTD-reporting, Article 3 is evaluated as not relevant ('NR').
- The agglomeration is considered compliant ('C') if the amount of load collected in collecting systems reaches 98% or more of the total load generated and the remaining load (which is not collected) is equal or less than 2,000 p.e.
- In case the amount of load not collected in a collecting system and not addressed by IAS exceeds 2% of the total load generated or 2,000 p.e., the agglomeration is assessed as not in compliance ('NC').
- If the amount of load addressed by IAS exceeds 2% of the total load generated or 2,000 p.e., the agglomeration is considered as being in "questionable compliance" ("QC") for Article 3. In practical terms, 'QC' is considered as equivalent to compliance, because for the moment the Commission considers that IAS is by definition appropriate unless there is a clear evidence of the opposite. The Commission may come back to EU-MS for further clarification. When the size of agglomeration is more than 100,000 p.e., detailed information regarding the IAS has to be provided.

4.2 Compliance with Article 4 (secondary treatment)

Provisions regarding biological treatment (Article 4 and Table 1) require that urban waste water entering collecting systems shall be subject to secondary or an equivalent treatment before discharge. Article 4 applies to all agglomerations with a load of 2,000 p.e. or more except for agglomerations with a size of 2,000 p.e. to 10,000 p.e. discharging into coastal waters and

except for agglomerations discharging into 'Less sensitive areas' (see Article 6 and 7 of the Directive).

In order to assess compliance with Article 4, two criteria need to be fulfilled:

- The total generated load of the agglomeration which is collected in a collecting system has to receive at least secondary treatment. This means that all UWWTPs serving this agglomeration have to provide at least secondary treatment.
- All UWWTPs serving the agglomeration have to be reported as complying with BOD₅ and COD values in Table 1 ('pass').

In case an agglomeration is compliant ('C') or is in a situation of questionable compliance ('QC') with Article 3, the assessment of compliance with requirements of Article 4 takes place as follows:

- The agglomeration is considered compliant ('C') if 99% or more of the generated load collected is treated by secondary treatment and the remaining generated load collected is lower than 2,000 p.e.
- If more than 1% or more than 2,000 p.e. of the collected load do not receive secondary treatment, the agglomeration is considered as not compliant ('NC') with Article 4.
- In the specific situation, where 0% of the generated load is collected and the agglomeration is assessed as 'QC' with Article 3, as the major part is addressed through IAS, Article 4 (and Article 5) is assessed as 'NR'.

4.3 Compliance with Article 5 (more stringent treatment)

Article 5 of UWWTD requires that, in agglomerations with a total load of more than 10,000 p.e., urban waste water entering collecting systems shall be subject to more stringent treatment than that described in Article 4 before discharge into sensitive areas.

Two criteria have to be met for compliance with Art. 5:

- The total load of the agglomeration, collected in collecting systems, has to be served by more stringent treatment of at least the type required by the sensitivity of the receiving area. This means that all UWWTPs serving this agglomeration have to provide the required more stringent treatment despite the design size of, or the load actually treated by, the plant.
- All UWWTPs serving the agglomeration have to be reported as complying with BOD₅ and COD values in Table 1 ('pass') and, as appropriate, with N_{tot} and/or P_{tot} values in Table 2 ('pass').

In case an agglomeration is compliant ('C') or of questionable compliance ('QC') with Article 3 and 4, the assessment of compliance with requirements of Article 5 is processed as follows:

- The agglomeration is considered compliant ('C') if 99% or more of the generated load collected is treated by more stringent treatment and the remaining generated load collected is lower than 2,000 p.e.
- If more than 1% or more than 2,000 p.e. of the generated collected load do not receive more stringent treatment, the agglomeration is considered as not compliant ('NC') with Article 5.

- In the specific situation, where 0% of the generated load is collected and the agglomeration is assessed as 'QC' with Article 3, as the major part is addressed through IAS, Article 5 (and Article 4) is assessed as 'NR'.

4.4 Application of individual appropriate systems (IAS) for waste water treatment (Article 3)

Article 3 of the Directive considers IAS in exceptional cases as an appropriate alternative solution for waste water collection and treatment.

The fraction of waste water addressed through IAS is generally assessed as in compliance with Article 3 of the Directive. In line with the meaning of the acronym IAS (individual or other appropriate systems), these systems are considered as "appropriate" by default, but with the constraint that this compliance is also considered as "questionable", unless more detailed information on IAS is made available by EU-MS.

Until now, the Commission has requested – in agreement with EU-MS – to provide information on the type of treatment provided in in-situ IAS and/or the rate of the generated load of an agglomeration transported to an UWWTP by truck after collection in IAS when the size of the agglomeration is more than 100,000 p.e. and the amount addressed by IAS is equal or more than 2% of the total load generated.

In the future the Commission may request further information on agglomerations for which a relevant percentage of the waste water is treated in IAS. The objective of such request would be to check if IAS is indeed "appropriate", as to ensure the level of environmental protection which is requested in Article 3.

4.5 Historical assessment of date of/criteria for the designation/review of SA and CSA (Article 5)

For those EU-MS joining the EU before the year 2004 and applying Article 5 (2) of the Directive since 2005 (namely IE, IT, ES, FR, EL and PT) a "historical assessment" as regards the date of and the criteria for the designation/review of SA and their related CSA was developed. The need for a "historical assessment" is due to the fact that, since the publication of the "4th Implementation (Synthesis) Report", the above-mentioned EU-MS have reviewed their list of SA and related CSA for several different reasons (e.g. it may happen that an EU-MS designated a SA in 1998 and reviewed the SA in 2004 because the SA was enlarged). However, a sound GIS-database as well as clear information on designation criteria and designation dates of SA and CSA is only available from the 5th Implementation (Synthesis) Report onwards (EU-MS did not report this coherent geo-referenced information before¹⁶).

Due to the type of data reported under the UWWTD Questionnaires from the 5th Implementation (Synthesis) Report onwards, in case of review, the COM is only informed about the review date of the SA and not about the first date of designation. However, this date defines by when (date) agglomerations with more than 10,000 p.e. discharging into the SA, have to comply with Article

¹⁶ With the integration into WISE, the UWWTD reporting cycle (and the results presented from the 5th Implementation (Synthesis) Report onwards) followed mandatory reporting standards for GIS data of sensitive areas. These standards enabled automated quality checks of GIS data which improved the data quality considerably.

5. The process of the “historical assessment” of SA and their related CSA (Article 5) can be described as follows:

- For each agglomeration, the EU-MS indicate the ID of the receiving area in the UWWTD Questionnaire. In case of discharge into a SA/CSA, the designation/review date and the criteria for designation are taken into account for the compliance assessment.
- In addition, the discharge points of each agglomeration are GIS-overlapped with the SA/CSA as reported in the 4th, 5th and 6th Implementation (Synthesis) Report.
- In case this GIS-overlap reveals the location in an earlier SA/CSA, the earlier designation date and criteria are assessed with respect to the designation criteria reported in the current reporting exercise. Reviews of SA/CSA, which result in a lowering of treatment requirements, are generally accepted (since the 7th Implementation (Synthesis) Report). On the contrary, in case the GIS-overlap reveals that the first date of designation of a SA/CSA is earlier than the review date reported in the current reporting exercise, the first date of designation is taken into account for the compliance assessment.

4.6 Compliance in specific cases

- Agglomeration connected to an UWWTP located in another Member State

In case one agglomeration discharges (part of) its waste water into an UWWTP located in another EU-MS, the treatment requirements for the UWWTP are defined on the basis of the sensitivity of the receiving area, in which the discharge point is located.

- Agglomeration discharging on land (catchment area of freshwater or catchment area of coastal water)

The Directive does not specify concrete treatment requirements for agglomerations with equal or more than 2000 p.e. discharging on land (catchment of freshwater or catchment of coastal water). However, any agglomeration above 10,000 p.e. discharging into SA or CSA requires the application of more stringent treatment, no matter whether the discharge is on land or into water. Applying a similar reasoning, agglomerations up to 10,000 p.e. discharging on land (catchment area of freshwater) require secondary treatment, agglomerations up to 10,000 p.e. discharging on land (catchment area of coastal water) do not require secondary treatment (see Article 4.1. of the UWWTD).

- One UWWTP serving an agglomeration larger than 10,000 p.e. with two or more discharge points located in different receiving areas

In the exceptional case of one UWWTP discharging waste water via two discharge points, one located in a sensitive area (N and/or P) and the other one located in a normal area, the requirements of the receiving area demanding for stricter emission standards will be applied for the whole UWWTP (i.e. the UWWTP has to provide more stringent treatment with N- and/or P-removal).

- Assessment of compliance in case a SA is designated under criterion b

In case agglomerations are located in a SA designated under criterion b (surface freshwater intended for the abstraction of drinking water which could contain more than the concentration of nitrate laid down under the relevant provisions of Council Directive 75/440/EEC of 16 June

1975¹⁷), an agglomeration with more than 10,000 p.e. is assessed as compliant if secondary treatment is in place with satisfactory monitoring results (BOD₅ and COD) and 3N treatment is reported to be in place. Compliance with Article 5 under criterion b is assessed for SA and for CSA.

- Assessment of compliance in case a SA is designated under criterion c

In case agglomerations are located in a SA designated under criterion c (areas where further treatment than that prescribed in Article 4 of the Directive is necessary to fulfil Council Directives), an agglomeration larger than 10,000 p.e. is compliant if,

- the effluents of all the treatment plants serving the agglomeration meet the quality standards set in Table 1 of Annex I (i.e. secondary treatment is in place with satisfactory monitoring results)
- more stringent treatment is reported to be in place (disinfection, nutrients removal, etc) and delivering the expected results (e.g. in terms of number of germs, nutrients concentration, etc).

Compliance with Article 5 under criterion c is only assessed for SA, but not for CSA.

4.7 Rate of compliance of waste water treatment plants

Taking into account the conclusions from the Luxembourg court case¹⁸, it is desirable to also reflect the compliance by individual urban waste water treatment plants (apart from the legal compliance assessment at “agglomerations” level).

An urban waste water treatment plant is considered to be in compliance when the authorities report one year of compliant results for all treated load, according to the requirements of the agglomeration(s) it is serving to, and also of the area of discharge. However, the compliance of an urban waste water treatment plant serving an agglomeration does not necessarily mean that the agglomeration in question is compliant with the treatment requirements in the Directive.

The treated waste water (load treated) in each individual urban waste water treatment plant together with its compliance status and the rate that the treated load represents (referred to the total agglomeration's load) will be calculated in order to show a more detailed description of the situation of waste water load treated in agglomerations.

To highlight the rate of compliance of waste water treatment plants, the “8th Implementation (Synthesis) Report” will for the first time not only present aggregated compliance information on the basis of agglomerations, but will also present data regarding individual wastewater treatment plants, as above described.

¹⁷ The Directive 75/440/EEC has been repealed by the Water Framework Directive 2000/60/EEC 7 years after its entry into force (i.e. on 22/12/2007).

¹⁸ Judgment of the European Court of Justice (First Chamber), C-576/11, 28 November 2013.

5 General principles – presentation of waste water installations in place

5.1 Differences between compliance and waste water treatment installations in place

As not all EU-MS are yet due to (full) compliance with the requirements of the Directive, a difference of presentation between compliance results and figures reflecting the waste water treatment installations in place is provided in the “UWWTD Implementation (Synthesis) Report”.

While the compliance results are obtained through the application of an assessment methodology (group of practices, procedures and rules used to assess the information on collection and waste water treatment reported by EU-MS) based on the compliance obligations in the Directive and developed by the Commission, the concept "wastewater installations in place" is a description and quantification of the situation in all the reported waste water installations in each EU-MS, regardless their compliance obligations.

The presentation of waste water installations in place describes the number and percentage of agglomerations which have a collecting system in place, those which are treated by secondary treatment and treated by more stringent treatment (when applicable), and also the number and percentage with monitoring results in compliance. Similar figures are provided for their waste water load. This presentation does not reflect the legal requirements of the Directive. The objective of this presentation is to appraise the waste water situation of an EU-MS going beyond the mere legal compliance check and is only done for those EU-MS not yet being due to (full) compliance, but still having transition periods for the implementation of the Directive.

Additional details on waste water installations in place are described as follows:

- Collecting systems in place

In case more than 0% of the generated load of an agglomeration is collected in collecting system, the agglomeration is assessed to have a collecting system. To give a more accurate country-wide picture, also the generated load collected in collecting systems is described in relative (%) and absolute (p.e.) numbers. In practical terms this means, for example, that an agglomeration, where 1% of the generated load is collected in a collecting system, is assessed as having a collecting system, but the absolute number of p.e. entering the collecting system, also provided, indicates that the fraction is very small.

- Secondary treatment in place

Two elements are of relevance: 1) treatment type and 2) monitoring results for BOD₅ and COD (the monitoring results of BOD₅ and COD indicate whether monitoring results meet the treatment requirements). There might be secondary treatment in place and failing monitoring results only during one year due to exceptional bad operation. This does not mean that there is a lack of secondary treatment. On the other hand side, when the performance for BOD₅ and COD is good for one urban waste water treatment plant, this obligatory means that secondary treatment is in place. In case at least a fraction of the generated load of an agglomeration receives secondary treatment (or more stringent treatment), this agglomeration is assessed as having secondary treatment. At the same time the load of the agglomeration (absolute number of p.e.) receiving secondary treatment is calculated and presented.

- More stringent treatment in place

Every type of treatment exceeding secondary treatment is taken into account for this presentation of information (i.e. N-removal and/or P-removal and/or chlorination and/or UV-treatment). In order to assess more stringent treatment to be in place for an agglomeration, two elements are required: 1) Treatment type and 2) Monitoring results. In case the total generated load meets the requirements as regards N or P performances of table 2 of the Directive, this agglomeration is assessed as having more stringent treatment in place. For other agglomerations, a calculation is made as regards the entering load receiving more stringent treatment (nitrogen removal and/or phosphorus-removal and/or other more stringent treatment) which reflects the amount of load involved. In the second step it is assessed whether monitoring results for N_{tot} and/or P_{tot} are reported with 'pass', depending on the urban waste water treatment plant's more stringent treatment type (N removal, P removal or both). An urban waste water treatment plant may have a more stringent treatment in place even if there are bad monitoring results as regard BOD_5 and COD (e.g. due to exceptional bad operation in one year).

5.2 Distance to full compliance

The "distance to compliance/distance to target" is an important indicator within the framework of the compliance promotion strategy for those new EU-MS who joined the European Union after the year 2004 and, in general, to estimate the efforts needed to finish the implementation of the Directive. This information will be presented in future UWWTD Implementation "Synthesis Reports," based upon data on those agglomerations in new EU-MS which are already due to compliance, but are not. Agglomerations not yet covered by obligations (i.e. where the deadlines in the Accession Treaties had not expired yet in the current reporting exercise) are not taken into account.

5.3 Status of waste water treatment installations in big cities

"Big cities/big dischargers" is not a term of the Directive. However, as they represent the biggest stressors to the aquatic environment, the "UWWTD Implementation (Synthesis) Report" includes descriptive information regarding their current status of waste water collection and treatment.

'Big cities' are defined like 'real' cities with more than 150,000 inhabitants, which may consist of one or several agglomerations. 'Big dischargers' represent all agglomerations with more than 150,000 p.e., whose waste water does not necessarily stem from inhabitants, but also from industrial activities.

The information provided on big cities/big dischargers in the "UWWTD Implementation (Synthesis) Report" is twofold:

- The "Synthesis Report" reflects the different collection pathways and the best available treatment types, without any legal compliance check.
- The "National Reports" show the most relevant situations of compliance/non-compliance with Articles 3, 4 and 5, also identifying the names of the big cities. Situations of full compliance with an Article would mean that the agglomeration(s) which conform the big city is (are) in full compliance too.

6 Frequently asked Questions and Answers

Nr	Reference	Question	Answers
1	<p>Compliance assessment based on agglomerations</p> <p>(Partial) compliance?</p>	<p>Why is the compliance assessment being processed on the level of agglomerations, and not urban waste water treatment plants?</p> <p>Why is there no partial compliance possible (if some UWWTPs of one agglomeration are already complying with the requirements)?</p>	<p>The compliance assessment is processed at agglomeration's level in order to ensure the application of the "hierarchical approach", which can only be made with a unique reference (ref: section 4) to Articles 3, 4 and 5.</p> <p>In case a specific fraction of an agglomeration is not compliant with Article 3, Article 4 and/or Article 5, the entire agglomeration is assessed as not compliant with each respective Article, also applying the hierarchical approach. Compliance with Articles 3, 4 and/or 5 at agglomeration's level is always defined as "full compliance" (i.e., by the whole agglomeration's load); however, and as described in section 4, a small margin of flexibility (amount/percentage of load in non-compliance) is allowed. As the concept "agglomeration" has been the reference used to assess compliance in all the past reporting exercises, partial compliance (at the level of plant) has not been applicable, at least by now.</p>
2	<p>Hierarchical approach of compliance assessment</p>	<p>If an agglomeration is not compliant with Article 3, why is it not compliant with Article 4 and/or Article 5 (even if the requirements for Article 4 and/or 5 are met)?</p>	<p>The legal compliance check follows a hierarchical approach, which was approved in a judgment of the European Court of Justice.</p> <p>This means that non-compliance with Article 3 (collection) entails non-compliance with Article 4 (secondary treatment) and Article 5 (more stringent treatment), even if the requirements of Articles 4 and 5 are met. Similarly, an agglomeration cannot be compliant with Article 5 if it fails to comply with Article 4. Such approach is logical, as waste water</p>

Nr	Reference	Question	Answers
			which is not adequately collected, cannot be adequately treated either.
3	Difference compliance results and presentation of waste water installations in place	What is the difference between the results of the compliance assessment and the presentation of waste water treatment installation in place?	While the compliance results are based on legal criteria and the application of a methodology (group of practices, procedures and rules used to assess the data on collection and waste water treatment reported by EU-MS) developed by the Commission, the description of the wastewater installations in place reflects the situation in all the reported waste water installations in each EU-MS, regardless their compliance obligations. It describes the number and percentage of agglomerations which have a collecting system in place, which are treated by secondary treatment and treated by more stringent treatment (when applicable), and also the number and percentage with monitoring results in compliance. Similar figures are provided for their waste water load. This presentation does not reflect the legal requirements of the Directive.
4	Agglomeration in MS-1 served by a treatment plant located in MS-2	How to report in case an agglomeration is served by a treatment plant located in another country?	MS-1 should create a default ID for the treatment plant (e.g in case a French agglomeration (MS-1) treats wastewater in a German (MS-2) plant, the ID type "FRDETP1" should be created for this plant) in the DEM-Tool/xml-file. No further information on the treatment plant or discharge point is required. The only information which should be given in addition is an explanation in the remarks-field, that the plant is located in another country. This situation is integrated in the QA/QC data validation.

Nr	Reference	Question	Answers
5	Agglomerations dropping under 2,000 p.e.	How to report agglomerations for which the size (p.e.) dropped below 2,000 p.e. since the last UWWTD-reporting exercise?	In case the size of the agglomeration dropped below 2,000 p.e. from one reporting period to the next reporting period, the agglomeration has to be reported with the current size ("successor"). The status of the agglomeration has to be reported indicating that the size of the agglomeration dropped below the UWWTD threshold value. In this case the generally required information for the compliance assessment becomes optional. Comprehensive scripts checking the historiography of agglomerations are followed during the QA/QC check.
6	Inactive elements	How to report inactive elements in general (e.g. in case one UWWTP was closed since the last reporting exercise and the wastewater is now treated in another UWWTP)?	EU-MS should report the predecessor or the successor according to WFD Guidance Document No. 22 (Updated Guidance on Implementing the Geographical Information System (GIS) Elements of the EU Water policy, 2009) in an extra document. Comprehensive scripts checking the historiography of agglomerations are followed during the QA/QC check.
7	Article 3 assessment (Indication of % of collected load)	Difficulty to indicate the % of the generated load of an agglomeration collected in different collecting systems without treatment	In principle, the idea behind the UWWTD data model is to provide only one collecting system without treatment for the entire generated load of an agglomeration, which is collected in collecting system and discharged without treatment. In case an EU-MS wants to report more than one collecting system without treatment for one agglomeration, expert judgement on the % of the generated load covered by different collecting systems without treatment is required.
8	Article 4 and 5 assessment (Performance data)	Difficulty to get information on the performance (monitoring	The Directive claims that all agglomerations more than 2,000 p.e. have to meet the requirements laid

Nr	Reference	Question	Answers
		<p>results) of UWWTPs with an organic design capacity of < 2,000 p.e., which treat agglomerations with a size \geq 2,000 p.e. (Annex I, D3 of the Directive gives the minimum annual number of samples to be taken according to the size of the treatment plants, starting at a size of 2,000 p.e.)</p>	<p>down in the Directive. Even in case an agglomeration equal or above 2,000 p.e. is treated by several UWWTPs with an organic design capacity less than 2,000 p.e., the EU-MS has to make sure that data which prove the performance of the UWWTP are available. It is recommended that the sampling patterns of these plants should follow, as a minimum, the pattern for plants between 2,000 and 9,999 p.e. described in Annex D of the Directive.</p>
9	<p>Article 4 assessment (storm water overflows)</p>	<p>Are storm water overflows included in the compliance assessment of Article 4?</p>	<p>Compliance with Article 4 of the Directive implies, that storm water overflows are included in the calculation of entering load (except exceptional situations) and that all the samples (except exceptional situations) have to be taken into account regarding the performances.</p>
	<p>List to be complemented after each UWWTD reporting exercise.</p> <p>So far, the list includes the main and key questions and answers provided during the following last meetings/workshops on reporting on the Urban Waste Water Treatment Directive as well as the consulting process in the frame of the last "UWWTD Implementation (Synthesis) Reports":</p> <ul style="list-style-type: none"> • Brussels, 6 November 2009 (preparation for "6th UWWTD Implementation (Synthesis) Report", reporting exercise Q-2009) • Brussels, 18 November 2010 (preparation for "7th UWWTD Implementation (Synthesis) Report", reporting exercise Q-2011) • Brussels, 20 January 2012 (preparation for "7th UWWTD Implementation (Synthesis) Report", reporting exercise Q-2011) • Brussels, 16 January 2014 (preparation for "8th UWWTD Implementation (Synthesis) Report", reporting exercise Q-2013) 		