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#### COMMISSION STAFF WORKING DOCUMENT

Accompanying the document

REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

Eighth Report on the Implementation Status and the Programmes for Implementation (as required by Article 17) of Council Directive 91/271/EEC concerning urban waste water treatment

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### 1- Details on implementation results presented in the 8<sup>th</sup> Implementation Report

The information provided in Chapter 2 of the 8<sup>th</sup> Urban Waste Water Treatment implementation report gives a good overview of the situation mainly at EU level. This annex provides additional tables, graphs and maps, illustrating in a more detailed manner the implementation results at (sub) national level.

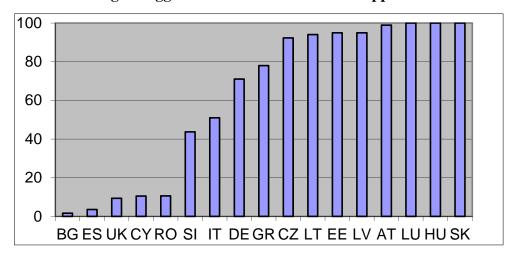
# 1.1- National and EU compliance rates as concerns collection, secondary treatment and more stringent treatment

Member State	Article 3 compliance rate (%)	Article 4 compliance rate (%)	Article 5 compliance rate (%)
Austria	100	100	100
Belgium	98	97	82
Bulgaria	12	11	1
Croatia	transition period pending	transition period pending	transition period pending
Cyprus	100	60	100
Czech Republic	100	87	54
Denmark	100	99	99
Estonia	94	97	89
Finland	100	100	100
France	100	88	99
Germany	100	100	100
Greece	100	96	100
Hungary	100	93	64
Ireland	100	91	1
Italy	-	-	-
Latvia	100	99	0
Lithuania	100	100	97
Luxembourg	100	99	42
Malta	100	0	0
Netherlands	100	100	100
Poland	-	-	-
Portugal	100	77	73
Romania	99	48	16
Slovakia	100	98	43
Slovenia	57	14	34
Spain	100	86	38
Sweden	100	98	89
United Kingdom	100	98	96
EU 15*	100	94	95
EU 13**	86	68	32
EU 28	98 stable above show ranges of	92	88 0% orange: >20% - 40%

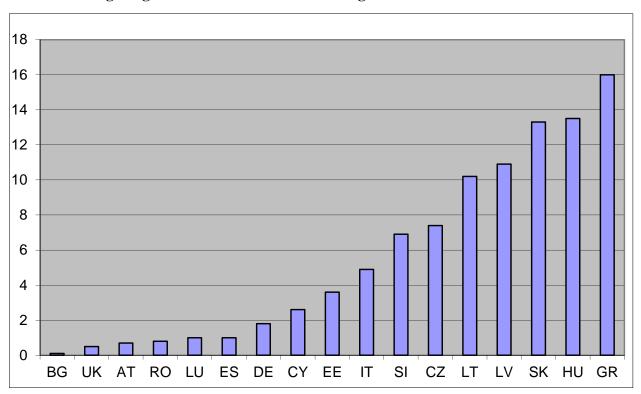
The colours in the table above show ranges of compliance: red: 0% - 20%, orange: >20% - 40%, yellow: >40% - 60%, green: >60 - 80%, blue: >80% - 100%, white: no data or transition period still pending.

### 1.2-Figures related to Individual or other Appropriate Systems (IAS)

### 1.2.1- Percentage of agglomerations in which IAS is applied



#### 1.2.2- Percentage of generated load addressed through IAS



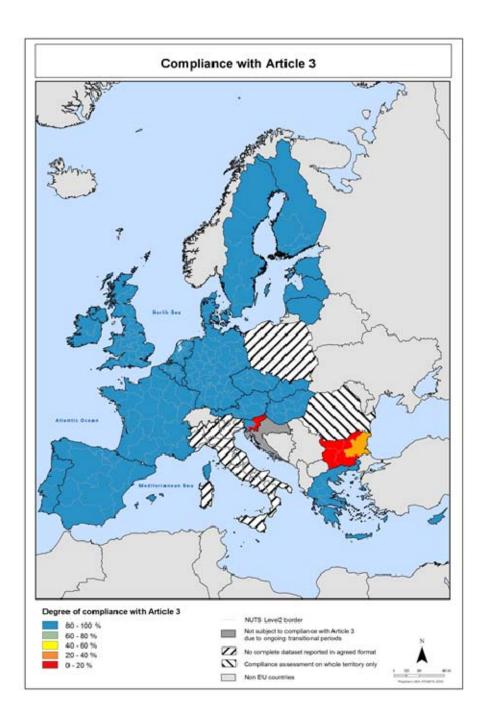
### 1.3- Compliance status of capital cities

MEMBER CAPITAL CITY		Population equivalents	Collection (Article 3)	Secondary Treatment (Article 4)	More stringent Treatment (Article 5.2 or 5.4)	FINAL Assessment		
Austria	Vienna	4,000,000	С	С	С	С		
Belgium	Brussels	1,460,000	С	С	NC	NC		
Bulgaria	Sofia	2,037,000	NC	NC	NC	NC		
Croatia	Zagreb	957,301	NR	NR	NR	NCO		
Cyprus	Nicosia	235,000	С	NC	NA	NC		
Czech Republic	Prague	1,140,489	С	С	NC	NC		
Denmark	Copenhagen	1,100,000	С	С	С	С		
Estonia	Tallin	468,000	С	С	С	С		
Finland	Helsinki	1,223,100	С	С	С	С		
France	Paris	9,577,285	С	С	С	С		
Germany	Berlin	3,948,976	С	С	С	С		
Greece	Athens	5,200,000	С	С	С	С		
Hungary	Budapest	2,468,109	С	С	NA	С		
Ireland	Dublin	2,362,329	С	С	NC	NC		
Italy	Rome	2,768,000	С	NC	NA	NC		
Latvia	Riga	762,739	С	С	NC	NC		
Lithuania	Vilnius	703,000	С	С	С	С		
Luxembourg	Luxembourg	228,741	С	С	NC	NC		
Malta	La Valetta	429,009	С	NC	NA	NC		
Netherlands	Amsterdam	901,908	С	С	С	С		
Poland	Warsaw		ND	ND	ND	ND		
Portugal	Lisbon	1,063,000	С	С	NA	С		
Romania	Bucharest	2,159,995	NC	NC	NC	NC		
Slovakia	Bratislava	600,032	С	С	NC	NC		
Slovenia	Ljubljana	302,293	С	NC	NA	NC		
Spain	Madrid	4,072,507	С	С	NR	С		
Sweden	Stockholm	2,586,400	С	С	С	С		
United Kingdom	London	10,012,460	С	С	С	С		

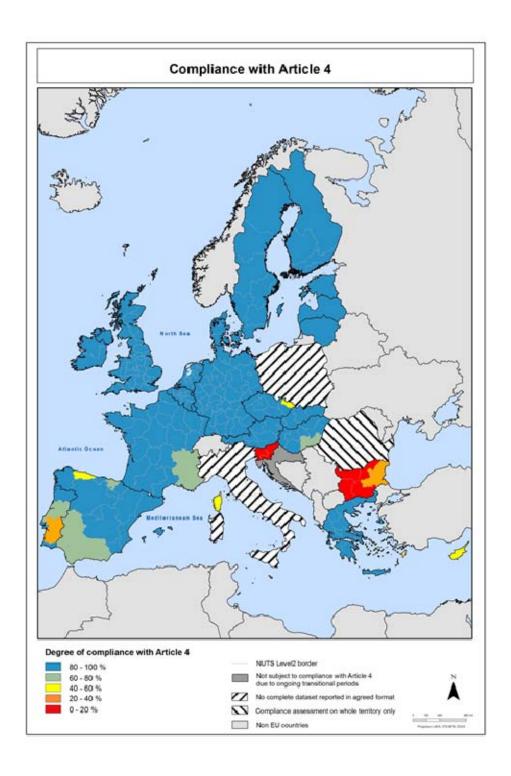
Compliance status: C = compliance, NC = non-compliance, NR = not relevant as the deadline is not expired yet, either for Article 3, 4 or 5, NA = not applicable as agglomeration is discharging into normal area, NCO = no compliance obligation (in general) and ND = no data available. Compliance with Article 5.4 refers to the area of discharge of the agglomeration.

### 1.4- Maps on compliance with the Directive at regional level

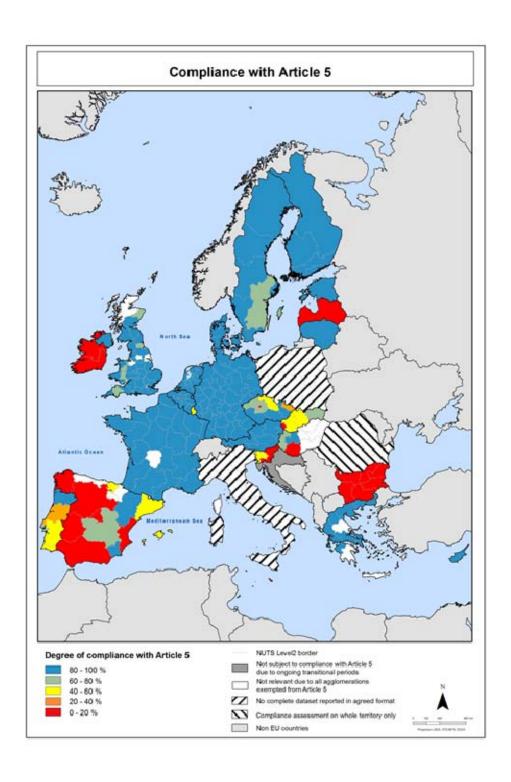
# ${\bf 1.4.1-Compliance\ with\ the\ requirements\ of\ Article\ 3\ of\ the\ Directive\ on\ regional\ level\ in}\\ {\bf EU-28\ Member\ States}$



# 1.4.2- Compliance with the requirements of Article 4 of the Directive on regional level in EU-28 Member States



# 1.4.3- Compliance with the requirements of Article 5 of the Directive on regional level in EU-28 Member States



## 2- Information on legal procedures during the $8^{\rm th}$ reporting exercise

The information provided in Chapter 3.4 of the 8<sup>th</sup> Urban Waste Water Treatment implementation report gives general information on the legal actions the European Commission undertakes when non-compliance with the Directive is suspected. This annex provides more details on ongoing and closed cases and on their status.

### 2.1- Court judgments 2013-2015

Case numbers <sup>1</sup>	Date of judgment	Issue at stake / Short summary
C-304/15 Commission v United Kingdom	pending	Failure to comply with Articles 3, 4 and 10 of UWWT Directive
C-320/15 Commission v Greece	pending	Failure to comply with Article 4 of UWWT Directive
C-314/15 Commission v France	pending	Failure to comply with Article 4 of UWWT Directive
C-557/14 Commission v Portugal	pending	Failure to comply with Case C-530/07 (Article 260 TFEU case)
C-398/14 Commission v Portugal	pending	Failure to comply with Article 4 of UWWT Directive (52 agglomerations between 2000 and 10000 population equivalent)
C-167/14 Commission v Greece	15.10.2015	This is the Court's judgment in a case the Commission brought against Greece for failure to comply with the Court's ruling in Case C-440/06 (Article 260 TFEU case). The Court declared that Greece failed to implement the judgment and imposed a penalty payment of EUR 3 640 000 per semester from the day of the judgment until full compliance is achieved. The Court also imposed a EUR 2 million lump-sum penalty payment on Greece.
C-395/13 Commission v Belgium	6.11.2014	This is the Court's judgment in a case the Commission brought against Belgium for failure to comply with the UWWT Directive in relation to 57 agglomerations with a population equivalent of more than 2,000 and less than 10,000. The Commission abandoned in part its claim for some agglomerations in light of the information provided by Belgium. The Court decided that Belgium failed to ensure the

<sup>&</sup>lt;sup>1</sup> The case number refers to the number attributed to the case when registered by the Court of Justice of the European Union.

C-85/13 Commission v Italy	10.04.2014	collection and treatment of urban waste waters in 15 agglomerations and failed to ensure proper treatment in additional 33 agglomerations. The Court also clarified that Member States are required under Annex I.D to ensure 12 samples over the course of the first year of operation of a facility to demonstrate compliance.  This is the Court's judgment in a case the Commission brought against Italy for failure to comply with the UWWT Directive. Italy did not contest this. The Court decided that
		Italy failed to ensure that all waste waters are collected and treated according to the applicable requirements in 41 agglomerations.
C-576/11 Commission v Luxembourg	28.11.2013	This is the Court's judgment in a case the Commission brought against Luxembourg for failure to implement the judgment in case C-452/05 (Article 260 TFEU case). The Court declared that Luxembourg failed to implement the judgment (non-compliance regarding treatment in 6 agglomerations out of 12 that were subject to the first judgment) and that it is justified to impose a penalty payment of EUR 2800 per day from the day of the judgment until full compliance is achieved. The Court also considered that a lump sum is necessary given the excessive duration of the infringement (7 years) and imposed a EUR 2 million penalty.
C-23/13 Commission v France	7.11.2013	This is the Court's judgment in a case the Commission brought against France for failure to comply with the UWWT Directive. France did not contest this. The Court decided that France failed to ensure that all waste waters are collected in one agglomeration and that all waste water is treated according to the applicable requirements in five agglomerations.
C-533/11 Commission v Belgium	17.10.2013	This is the Court's judgment in a case the Commission brought against Belgium for failure to implement the judgment in case C-27/03 (Article 260 TFEU case). The Court declared that BE failed to implement the judgment (non-compliance regarding collection systems for 7 agglomerations and treatment in 21 agglomerations) in relation to five agglomerations and that it is justified to impose a penalty payment of EUR 4,722 per day to be calculated for six month periods, i.e. EUR 859,404 for every six month-period since this judgment. The Court also considered that a lump sum is necessary as a deterrent measure and imposed a EUR 10,000,000 penalty.
C-517/11 Commission v	07.02.2013	This is the Court's ruling in a case the Commission brought against Greece for failure to take comply with the Habitats

Greece	Directive (92/43/EEC) and UWWT Directive. The Court
	ruled that Greece failed to comply with the Habitats Directive
	as it had not taken the required steps to avoid the
	deterioration and pollution of Lake Koroneia. The Court also
	ruled, as acknowledged by Greece, that it failed to comply
	with the UWWT Directive Articles 3 and 4 by not ensuring
	collection and treatment of waste water in Langadas
	agglomeration.

### 2.2- Main infringement cases 2013-2014

#### **Infringement Cases**

CASES RELATED TO LARGE TOWNS/CITIES (above 10,000 or 15,000 population equivalents) Case number<sup>2</sup> Member State Court Ruling and related date (if applicable) 08/07/2004 (C-27/03) 1999/2030 BE 17/10/2013 (C-533/11) (Art 260) 2002/2123 ES Pending (no referral to the Court yet) 23/11/2006 (C-452/05) 2002/2125 LU 28/11/2013 (C-576/11) (Art 260) PT 2002/2128 8/09/2011 (C-220/10) 2002/2130 SE 06/10/2009 (C-438/07) 25/10/2007 (C-440/06) 2004/2030 EL (Pending Art 260 - C-167/14) 2004/2031 ES 14/04/2011 (C-343/10) 2004/2032 07/11/2013 (C-23/13) FR 2004/2035 PT 07/05/2009 (C-530/07) 2004/2034 IT 19/07/2012 (C-565/10) 2009/2034 IT 10/04/2014 (C-85/13)

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<sup>&</sup>lt;sup>2</sup> The case number refers to the reference number attributed by the European Commission to each infringement case.

CASES RELATED TO SMALL AND LARGE AGGLOMERATIONS								
Case number <sup>3</sup>	Member State	Court Ruling and related date (if applicable)						
2009/2304	BE	6/11/2014 (C-395/13)						
2009/2306	FR	Pending before the Court (Case C-314/15)						
2009/2309	PT	Pending before the Court (Case C-398/14)						
2009/2310	SE	Pending (no referral to the Court yet)						
2011/2027	EL	Pending before the Court (Case C-320/15) Referral to the Court						
2012/2100	ES	Pending (no referral to the Court yet)						
2013/2056	IE	Pending (no referral to the Court yet)						
2013/2055	UK	Pending before the Court (Case C-304/15) Referral to the Court						
2014/2059	IT	Pending (no referral to the Court yet)						

#### 3 - Distance to compliance

#### 3.1 - Introduction

This report includes for the first time a new concept, "distance to compliance", with the objective to have a broader view on the situation in the Member States on collection and adequate treatment of the generated waste water load. This new concept does, in no way, replace the formal assessment of the compliance with the requirements of Articles 3, 4 and 5 of the Directive. It is meant to present the rate of waste water load that is:

- adequately connected to a centralised urban waste water collecting system (or addressed *via* Individual or other Appropriate System IAS) and then:
- <u>treated at</u> an adequate level (secondary or more stringent treatment) as required by the Directive,
- <u>and</u> with the performance requirements under tables 1 or 2 of the Annex I of Directive 91/271/EEC (UWWTD).

In this document, all EU MS have been considered except PL, due to the provision of insufficient and poor quality data under the current reporting exercise, and HR, still without compliance obligations by 2012. IT was partially included (information from two regions was missing).

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<sup>&</sup>lt;sup>3</sup> The case number refers to the reference number attributed by the European Commission to each infringement case.

#### Example of the difference between "compliance" and "distance to compliance"

If in an agglomeration above 10,000 p.e. that discharges in a sensitive area for N and P, 10% of the load is neither connected to a collecting system nor addressed *via* IAS, but 90% of the load is connected to a collecting system and treated in a plant which applies a compliant more stringent treatment, this agglomeration will be considered as non-compliant under Articles 3, 4 and 5, and the compliance rates will be 0%/0%/0%.

If the "distance to compliance" assessment is applied, 100% of the connected waste water load is adequately treated, and 10% of the waste water would need to be connected or addressed *via* IAS to comply with the requirements of Article 3 of the Directive.

Consequently, the "distance to compliance" regarding collection or treatment through IAS would be equal to 10% and "distance to compliance" concerning wastewater load connected as regards secondary and more stringent treatment would be equal to 0%.

In the following sections, different sets of rates are compared and presented:

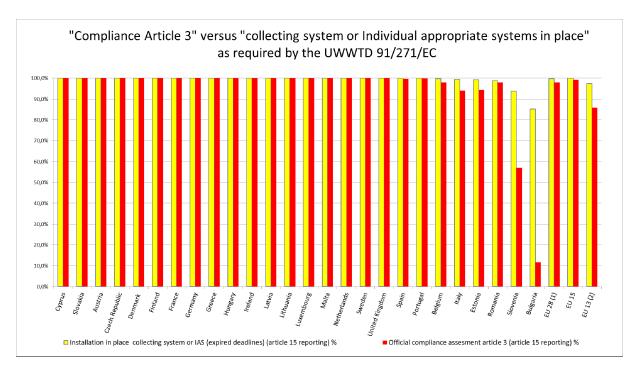
- Comparison between "compliance" and "installations in place in which performance is met" at country level shows that the first concept is much more stringent than the second one and that large differences between both values (low compliance rate versus higher good performance rate in the generated load) may be found.
- Comparison between "non-compliance" (as the complementary rate of the "compliance"), and "distance to compliance" shows that large differences in their respective values are frequently found (the "distance to compliance" rate is usually much lower). This indicates that both concepts, which are addressed to measure the lack of implementation of the UWWTD, are conceptually different and that solely measuring "non-compliance" will give a stricter and more severe outlook on a Member State's implementation of the UWWTD.

#### 3.2 - Expired deadlines of the UWWTD

This chapter concerns only the urban waste water that falls under specific deadlines already expired at the reference year (2011 or 2012).

#### 3.2.1 - Connection to collecting systems and treatment through IAS

Differently from the (formal) Article 3 "compliance assessment", this calculation takes into account all the urban waste water that is adequately connected to a collecting system or addressed *via* IAS regardless of the proportion of waste water not collected/treated at all.



The results of this assessment, made for 26 Member States, show that a very small percentage (0.3%) of the total generated load is neither connected to collecting systems nor addressed *via* IAS.

Only SI and BG show a "distance to compliance" above 2%, which in any case is far below the "non-compliance" rates:

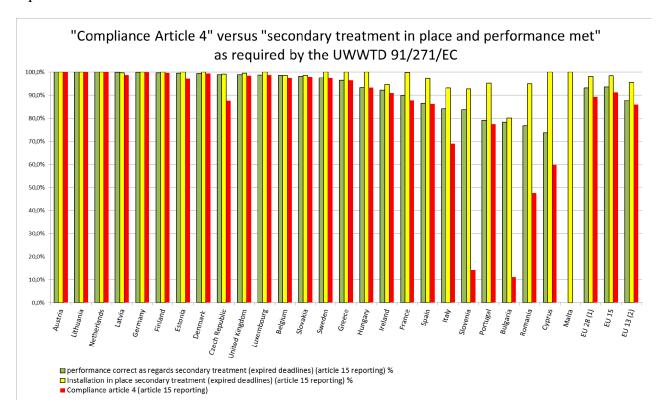
- 14.9% in Bulgaria (88.4% official rate of non-compliance under Article 3, i.e. compliance rate of 11.6%).
- 6.1% in Slovenia (43% official rate of non-compliance under Article 3, i.e. compliance rate of 57%).

# 3.2.2 - Waste water connected, secondary treatment in place and performance requirements met

This calculation only looks at the connected waste water, which should meet the requirement of a secondary treatment (treatment level and performance). Thus, for this calculation the waste water not connected or addressed *via* IAS is not considered.

This assessment shows a more positive result than the related compliance assessment mainly due to the fact that in the latter a failure concerning Article 3 automatically entails a failure under Article 4. This situation is particularly relevant in SI, BG and RO. There is also a similar situation in the agglomerations with several treatment plants in which only one plant does not meet the requirements of Article 4. As regards "distance to compliance", only the load that is connected but not adequately treated as required under Article 4 is taken into account.

The "distance to compliance" at EU level in relation to the secondary treatment level represents only about 1.8% of the total connected load. As regards treatment performance it represents about 6.9% of the total connected load.



The difference in results between both concepts is particularly high in BG, CY, SI and RO.

Member State	Distance to compliance Secondary treatment performance not correct (Rate of the total load connected)	Non-compliance under Article 4 (Percentage)				
Slovenia	16.3%	85.9%				
Bulgaria	21.7%	88.8%				
Romania	23.3%	52.5%				
Cyprus	26.4%	41.2%				

In MT, the "distance to compliance" as regards treatment in place is 0%, but the compliance assessment shows 100% "non-compliance" rate under Article 4. An explanation for this may be the following: all treatment plants in MT are relatively new and they should theoretically be in line with the requirement of the Directive but, due to an excess of farm manure discharges into the collecting system, the performance requirements are not met. A reduction in such discharges might solve the problem.

# Why performance results do not always respond to the requirements of the treatment in place?

If the performance results are below the treatment in place requirements, there might be several explanations:

- The waste water load or the volume entering the treatment plant is above its capacity and, as a result, performance is not good. This is the case of Malta. In other cases, the plant may be obsolete and should be renewed to be able to treat correctly the generated waste water.
- The treatment plant was new by the reported year and worked well, but not enough samples were considered (Annex I. D.3 of the UWWTD) and the performance requirements were not met.
- Other situations not falling in the above categories, such as bad operation of the treatment plant.

# 3.2.3 - Waste water connected, more stringent treatment in place and performance requirements met

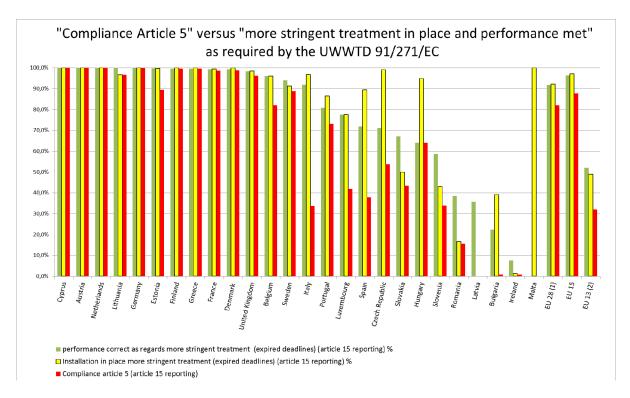
This calculation only looks at the waste water connected that should meet more stringent treatment requirements and performance results<sup>4</sup>.

This assessment shows a more positive result than the compliance assessment mainly due to the fact that in the latter a failure concerning Article 3 automatically entails a failure under Articles 4 and 5. There is also a similar situation in the agglomerations with several treatment plants in which only one does not meet the requirements of Article 5. As regards "distance to compliance", only the load that is connected but not adequately treated as required under Article 5 is taken into account.

The "distance to compliance" as regards more stringent treatment in place represents 7.9% of the total connected load. As regards the performance requirements, it represents 8.3% of the total connected load.

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<sup>&</sup>lt;sup>4</sup>For this calculation the waste water not connected or addressed through IAS is not considered.



The difference between compliance with Article 5 and "distance to compliance" is particularly high for IT, LU, ES, SK, SI, RO, LV and BG. For MT, the explanation is the same as for the previous point.

Member State	Distance to compliance  More stringent treatment performance not correct  (Rate of the total load connected)	Non-compliance under Article 5 (Percentage)					
Italy	8.1%	66.3%					
Luxembourg	22.4%	58%					
Slovenia	24.7%	66.1%					
Spain	28.1%	62%					
Slovakia	32.8%	56.7%					
Slovenia	46,1%	66.1%					
Romania	61.5%	84.5%					
Latvia	64.3%	100%					
Bulgaria	77.5%	99.3%					

# Why in occasions the performance results are "right" but more stringent treatment requirements are not met?

This is the case of Slovakia, Romania and Latvia. It is not an usual situation, which might be explained as follows:

- Bad reporting of the installation in place. MS have declared only a secondary treatment, but in fact there is more stringent treatment in place.
- High dilution of the incoming load. The concentration performance corresponding to a more stringent treatment could be met by applying only a secondary treatment.

Whilst the first situation may simply be a reporting mistake, the second one, of more concern, could mean the presence of a huge amount of clear water in the collecting systems, which might lead to discharges before entering the treatment plant, if the urban waste water system does not have enough capacity.

#### 3.3 - Varying deadlines of the UWWTD

Most of the deadlines to meet different obligations set out by the UWWTD have expired.

Nevertheless, some deadlines have not yet expired for some of the countries that became members of the EU in or after 2004<sup>5</sup>:

- Cyprus: 31 December 2012, concerning agglomerations of 15,000 p.e. and below,
- Bulgaria: 31 December 2014, concerning agglomerations of 10,000 p.e. and below,
- Latvia, Hungary, Slovakia and Slovenia: 31 December 2015 concerning agglomerations of 10,000 p.e. and below,
- Romania: three pending deadlines, 31 December 2013, 2015 and 2018, concerning various aspect of Articles 3, 4 and 5.

RO and CY are the only MS that had non-expired deadlines related to more stringent treatment by the year reported upon.

In RO, by end of 2012, 61% of the urban waste water load must be collected or addressed *via* IAS (Article 3), 51% of the urban waste water load must be treated by secondary treatment (Article 4) and 51% of the waste water load must be treated by more stringent treatment (Article 5). The entire waste water load connected and adequately treated was taken into account for the assessment of the "distance to compliance" for those expired deadlines. Given that the targets set in those expired deadlines have not yet been achieved, the distance to compliance related to targets set in the pending deadlines will necessarily be equal to 100% for collection, treatments and performance. Due to this situation and the weight of RO in the group of EU13 countries, the average distance to compliance for the various Articles regarding EU13 is large, as can be seen in the graphs presented in the paragraphs below.

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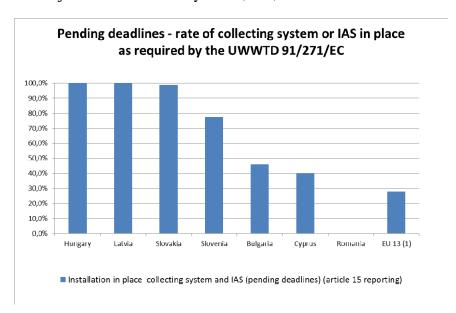
<sup>&</sup>lt;sup>5</sup> Croatia not considered

Some EU15 MS like FR, UK and IT designated late certain areas as sensitive for the purpose of article 5 and the transitional periods of some of those sensitive areas have not expired yet.

#### 3.3.1 - Connection to collecting systems and treatment through IAS

In LV, HU and SK, more than 98% of the urban waste water load is already correctly collected or addressed *via* IAS. It can therefore be expected that the deadine for Article 3 for those countries will be respected.

The objective is further away for SI, BG, CY and RO.

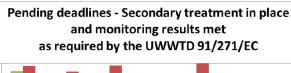


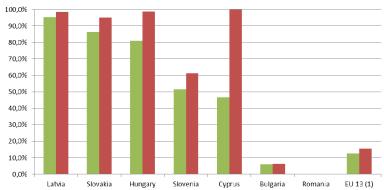
#### 3.3.2 - Waste water connected, secondary treatment in place and performance met

In LV, SK and HU, more than 80% of the urban waste water load is already correctly treated in a way that the performance requirements under Article 4 of the Directive are met.

The objective is further away for SI, CY, BG and RO.

In CY, it seems that secondary treatment is in place, but performance requirements are not yet met.





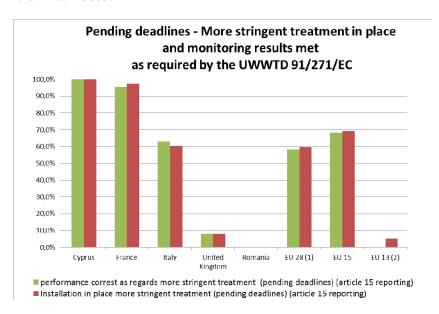
performance correct as regards secondary treatment (pending deadlines) (article 15 reporting)
 Installation in place secondary treatment (pending deadlines) (article 15 reporting)

#### 3.3.3 - Waste water connected, more stringent treatment in place and performance met

FR, UK and IT have still pending deadlines as regards some sensitive areas for Article 5. Among these MS, UK is the country that is the furthest away from the implementation objective: its sensitive areas under transitional period in 2012 were, by then, still far from compliant with Article 5.

As explained above, there are only two MS among the EU-13 in which the "distance to compliance" concerning more stringent treatment (implementation and performance) is applicable: CY and RO.

In CY, already 100% of connected waste water receives more stringent treatment and meets the performance requirements. In RO, as explained under point 3.3, "distance to compliance" is still at 100%.



#### 3.4 - Conclusions

Most of the EU-MS have correctly reported information under Article 15, even in cases in which it was not officially required (pending deadlines). Applying the concept of "distance to compliance" on this very large dataset shows in general a **more positive picture than the result of the compliance assessment under the directive.** In practical terms, this means that most of the MS are on good track to correctly implement the UWWTD.

The most relevant conclusions that can be drawn are the following:

Obligations for which the **deadlines have already expired** concern 26 MS and a total generated load of 546 million p.e.. To fully comply with the Directive, the following additional effort is required:

• To collect and treat, or address *via* IAS, about 2 million p.e., which represents about 0.3% of the total urban waste water generated load.

- For the urban waste water load already collected, **to apply secondary treatment on about 10 million p.e.** (1.8% of the total collected load) and to correctly operate about 36 million p.e. (6.9% of the total collected load) in order to reach the performance requirements under Article 4.
- For the urban waste water load already collected, **to apply more stringent treatment on about 24 million p.e.** (8.3% of the total collected load) and to correctly operate about 25 million p.e. (9.4% of the total collected load) to reach the performance requirements under Article 5.

Obligations that will have to be met when pending deadlines expire concern 10 MS and will require the following additional effort:

- to collect and treat, or address *via* IAS, about 9 million p.e. which represents about 72% of the total urban waste water generated load.
- For the urban waste water load already collected **to apply secondary treatment on about 11 million p.e.** (85% of the total collected load) and to correctly operate about 11.5 million p.e. (88% of the total collected load), in order to reach the performance requirements under Article 4.
- For the urban waste water load already collected, to apply more stringent treatment on about 13.5 million p.e. (40% of the total collected load) and to correctly operate about 14 million p.e. (6.4% of the total collected load) to reach the performance requirements under Article 5.

#### **Caution**

As regards expired and pending deadline, the load not collected or addressed via IAS is not taken into account in the "distance to compliance" treatment targets. There are two reasons for that:

- There is no information about the future destination of this load (connection or IAS). At this stage, it is not possible to consider that it has to be treated in an urban waste water collective treatment plant.
- The information given is not sufficient to know if the treatment plant in place is already able to welcome this supplementary load. If it is adequately designed the work to do is to connect the buildings to a collecting system which could already exist or has to be created and not to create new treatment capacity.

As a result of these two uncertainties, an unknown part of the 2 million p.e. for expired deadlines and 9 million p.e. for pending deadlines will have to be added in the "distance to compliant" secondary and more stringent treatment objectives.

Most of the works that have to be completed by MS to comply with the Directive are covered by the reports submitted by MS under Article 17 of the Directive. According to the information provided in those reports, full compliance with the Directive requires additional investments of about 22 billion EUR.

#### 4 - Summary of assessment of Article 17 Report

The table below provides more detail information on what is described in chapter 3.2 of the 8<sup>th</sup> Urban Waste Water Treatment implementation report.

					I										
UWWTD Article 17 assessment	Austria	Belgium	Bulgaria	Croatia	Cyprus	Czech Republic	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy
Number of collecting system works planned (expired deadlines)	-	39.0	87					17		1		332		12	233
Number of WWTP works planned (expired deadlines)	-	29.0	87		1	27		5		184		126		49	1613
Number of collecting system works planned (pending deadlines)			250	278	39										
Number of WWTP works planned (pending deadlines)			232	265	15				5	19					
Load entering the planed UWWTP (p.e.)	-	92,290.0	3,751,371	-	256,400	1,922,940		39,038	280,000	2,003,543		646,500		3,180,896	13,079,189
Organic design capacity UWWTP (as planned) (p.e.)	-	126,810.0	7,874,073	7,291,870	847,067	2,071,440		39,038		3,207,622		840,500		4,773,439	22,292,150
Forecast cost investment needed for the collecting system (as in the national plan) (million €)	-	14.0	2,337.1	1,997.0	598.0			76.5		6.0				38.1	1,623.5
Forecast cost investment needed for the UWWTP (as in the national plan) (million €)	-	59.0	632.4	883.0	227.7	95.0		11.7	47.0	810.7				405.0	2,955.6
Amount of (planned) EU funding needed for collecting systems (million €)	-	17.5	341.0	1,300.0	31.0			65.0		3.0					307.8
Amount of (planned) EU funding needed for WWTP (million €)	-		68.9	574.0	30.2	47.0		9.5		143.0					157.5
Name of EU fund planned to be used	-	BEI	COHESION FUNDS	COHESION FUNDS	COHESION FUNDS	ERDF and COHESION FUNDS		COHESION FUNDS		FEADER, FEDER, ONEMA		COHESION FUNDS			Several
current yearly investment collecting system (million €)	182.0	158.3	210.7	79.0	0.0	50.0	386.0	50.5	32.5	2,645.0	2,000.0	182.0	319.0	100.3	4,211.0
current yearly investment treatment plant (million €)	33.0	182.7	128.9	19.0	13.8	83.3		14.5	12.0	1,586.0	2,387.0		192.0	195.0	800.0
expected yearly investment collecting system (million €)	338.8	158.3	292.0	199.7	43.0	50.0	386.0	12.6	36.3	2,630.0	2,000.0	250.0	364.3	100.3	3,341.0
expected yearly investment treatment plant ((million €)	75.5	127.3	79.0	88.3	14.0	83.3		3.5	16.3	1,512.0	2,387.0		96.7	195.0	5,179.0
Evolution of the investments						$\Rightarrow$	$\Rightarrow$			$\Rightarrow$	$\Rightarrow$			$\Rightarrow$	
method used for the calculation of current / expected investment	2013 / average 2014- 2017	Flanders (average 2011-2013 / average 2011-2013) / average 2011-2013 / average 2015-2014 / average 2015-2015 / average 2015-2015 / average 2013- 2016 for collecting systems) Brusseb-Capital (average 2013- 2017/average 2013/2017)	average 2013-2014 / average 2015-2024	2013 / average 2014- 2023	average 2012-2013 / average 2014-2027	average 2013-2018 /average 2013-2018	2013 /2013	average 2012-2014 / average 2015-2020	average 2009- 2012/average 2013- 2020	average 2010-2012/ 2012		average 2012-2013 / average 2014-2020	average 2011-2012 / average 2013-2015	average 2014-2016 / average 2014-2016	average 2013-2014 / average 2015-2016
Total organic design capacity (p.e.)	21,172,881	10,669,048.0	7,896,323(3)	7,589,670	1,755,067	14,836,446	11,687,266	1,586,775	6,600,000	98,400,000	147,356,260	13,986,951	13,550,576	5,331,277	97,335,468
generated load agglomerations 2011 or 2012 (article 15 reporting)	20,267,694	9,213,800	8,225,559	5,067,637	995,000	7,590,604	11,607,945	1,642,766	5,239,700	71,548,392	112,878,422	12,300,853	11,665,187	5,164,016	82,301,399
Ratio load entering the planed UWWTP/total generated load		1.0%	45.6%		25.8%	25.3%		2.4%	5.3%	2.8%		5.3%		61.6%	15.9%
Types of treatment WWTP (as planned)		4 secondary treatment, 24 more stringent treatment	232 urban waste water treatment plants for agglomerations between 2 000 and 10 000 p.e., with secondary treatment and 87 for agglomerations above 10 000 p.e., out of witch 25 with more stringent (nitrogamphosphorus) treatment are planned.	27 primary, 161 secondary, 61 more stringent nitrogen phosphorus, 15 less than primary	1 secondary, 12 more stringent microbiology and 1 more stringent other	10 primary, secondary, terciary treatment with N and 12 primary, secondary, terciary with N and P		5 type primary, secondary or more stringent	5 more stringent UWWTPs	1 primary, 83 secondary, 7 more stringent microbiology, 3 more stringent nitrogen. 1 more stringent nitrogen, 1 more stringent nitrogen, 1 more stringent nitrogen, 1 more stringent phosphorus, 27 more stringen retrogen-phosphorus, 27 more stringen retrogen-strongent phosphorus, 22 more stringent phosphorus, 2 more stringent phosphorus, 2 more stringent phosphorus, ricrobiology, 2 more stringent phosphorus, and 2 more stringent phosphorus, and 2 more stringent phosphorus, 2 mo		at least secondary		22 secondary, 5 more stringent microbiology, 6 more stringent NP, 14 more stringent Pa more stringent N	Several different types
Population (million) (Eurostat 2014) Ratio total investment/population	8.5 49	11.2 26	7.2 52	4.3 67	0.86 66	10.5 13	5.6 69	1.3	5.4 10	65.9 63	80.8 54	11 23	9.9 47	4.6 64	60.7 140
Ratio total investment/population	49	20	34	0/	00	13	03	12	10	00	34	- 43	4/	04	140

													United	
UWWTD Article 17 assessment	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	Kingdom	TOTAL
Number of collecting system works planned (expired deadlines)	25			3		1396	3		88	16			5	2,257
Number of WWTP works planned (expired deadlines)	7		8	3		749	86		61	6	725	16	41	3,820
Number of collecting system works planned (pending deadlines)	62					161			37	77				904
Number of WWTP works planned (pending deadlines)	8			3		1018			15	49	3			1,626
Load entering the planed UWWTP (p.e.)			79,670				1,615,986		346,456	1,432,662	11,333,325(2)	236,641	2,812,431	43,109,338
Organic design capacity UWWTP (as planned) (p.e.)			144,000				2,264,042		369,354	1,838,550	8,999,796(2)	472,562	2,933,634	66,385,947
Forecast cost investment needed for the collecting system (as in the national plan) (million €)	81.0					2,626.9	7.2		694.4	322.1				10,422
Forecast cost investment needed for the UWWTP (as in the national plan) (million €)	26.0		100.9			839.5	175.5		112.3	358.5	2,944.0	34.6	882.4	11,601
Amount of (planned) EU funding needed for collecting systems (million €)	69.0						0.6		590.0	218.4				2,943
Amount of (planned) EU funding needed for WWTP (million €)	22.0			í í			50.0		92.3	220.6	1,074.0			2,489
Name of EU fund planned to be used	COHESION FUNDS						COHESION FUNDS		Cohesion funds AND European Regional Development Fund	COHESION FUNDS AND RD FUNDS	COHESION FUNDS, STRUCTURAL FUNDS, FEDER, ETC.			
current yearly investment collecting system (million €)	44.4	78.5	68.5	6.8	960.0	1,197.8	1.2	316.4	170.0	72.3	,		892.0	14,414
current yearly investment treatment plant (million €)		57.5	19.0	22.5	338.0	484.7	29.1	317.2		45.9	266.4	34.6	529.0	7,791
expected yearly investment collecting system (million €)	13.5	17.5	90.5	4.0	807.0	900.2	1.2	342.6	105.8	48.0		•	892.0	13,424
expected yearly investment treatment plant ((million €)	3.7	13.0	39.5	3.0	323.0	407.1	29.1	391.3	18.5	31.0	189.2	34.6	529.0	11,869
Evolution of the investments														à
method used for the calculation of current / expected investment	average 2007-2015 / average 2016-2021	average 2008-2011 / average 2012-2015	average 2013-2014 / average 2015-2016	overage 2009-2011   Javerage 2012-2020	average 2010-2012 / average 2013-2020	2010-2012 / 2013- 2015	average 2012-2017 / average 2012-2017 Only funds requested for new operations. Not included renovation of the systems	average 2011-2013 /average 2014-2018	average 2015-2015 /average 2016-2021	average 2010- 2013/average 2014- 2017	average 2014 / average 2015-2023	2012/2012	average 2010-2015 / average 2010-2015	
Total organic design capacity (p.e.)	2,240,079	3,580,800	1,034,855	584,000	23,448,219	62,401,324(4)	16,561,230	22,616,687	8,290,014	2,453,802	97,075,953	12,720,243	90,498,351	803,259,565
generated load agglomerations 2011 or 2012 (article 15 reporting)	1,517,782	2,757,900	657,997	502,204	17,618,487	43,526,460	11,653,613	21,409,175	5,072,755	1,462,223	68,272,356	12,715,305	69,346,038	622,221,269
Ratio load entering the planed UWWTP/total generated load	1		12.1%				13.9%	-	6.8%	98.0%	16.6%	1.9%	4.1%	6.9%
Types of treatment WWTP (as planned)	3 moore ablingent Mitrogen-Plosophorus		5 more stringent Nitrogen-Phosphorus			344 type PUB2, 54 type PUB1, 1 type non PUB3, 42 type non PUB1, 16 type non B, 24 type non B, 24 type B and 87 not known	2 secondary, 51 secondary trainest, 24 more stringent		44 secondary, 24 more stringer(17/introgen and 7 elitrogen-phosphonus) and 8 not known	54 more stringent treatment plants	Several different types	I secondary breatment, 9 more atringent treatment (pilotogen) and on more stringent treatment (others)	2 primary, 21 secondary, 16 more stringent phosphorus, 2 more stringent nitrogen-phosphorus	
Population (million) (Eurostat 2014)	2	2.9	0.55	0.4	16.8	38.5	10.4	19.9	5.4	2.06	46.5	9.6	64.3	507