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**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**

{COM(2016) 105 final}

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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*

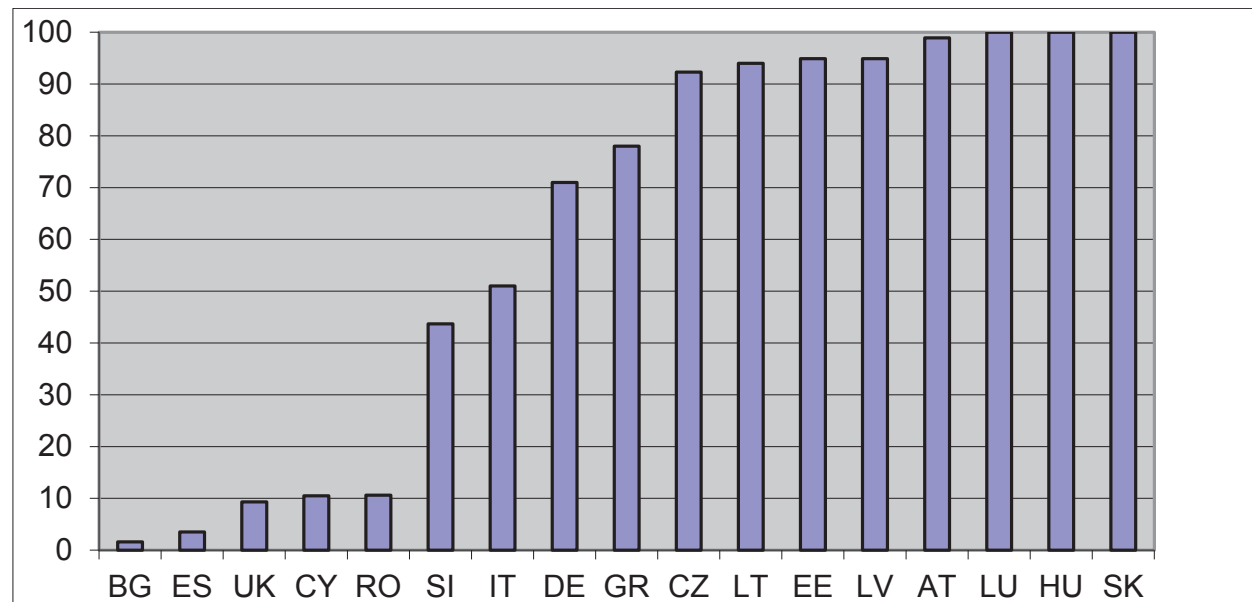
| Member State   | Article 3<br>compliance<br>rate (%) | Article 4<br>compliance rate (%) | Article 5<br>compliance rate (%) |
|----------------|-------------------------------------|----------------------------------|----------------------------------|
| Austria        | 100                                 | 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                               |
| <b>EU 15*</b>  | <b>100</b>                          | <b>94</b>                        | <b>95</b>                        |
| <b>EU 13**</b> | <b>86</b>                           | <b>68</b>                        | <b>32</b>                        |
| <b>EU 28</b>   | <b>98</b>                           | <b>92</b>                        | <b>88</b>                        |



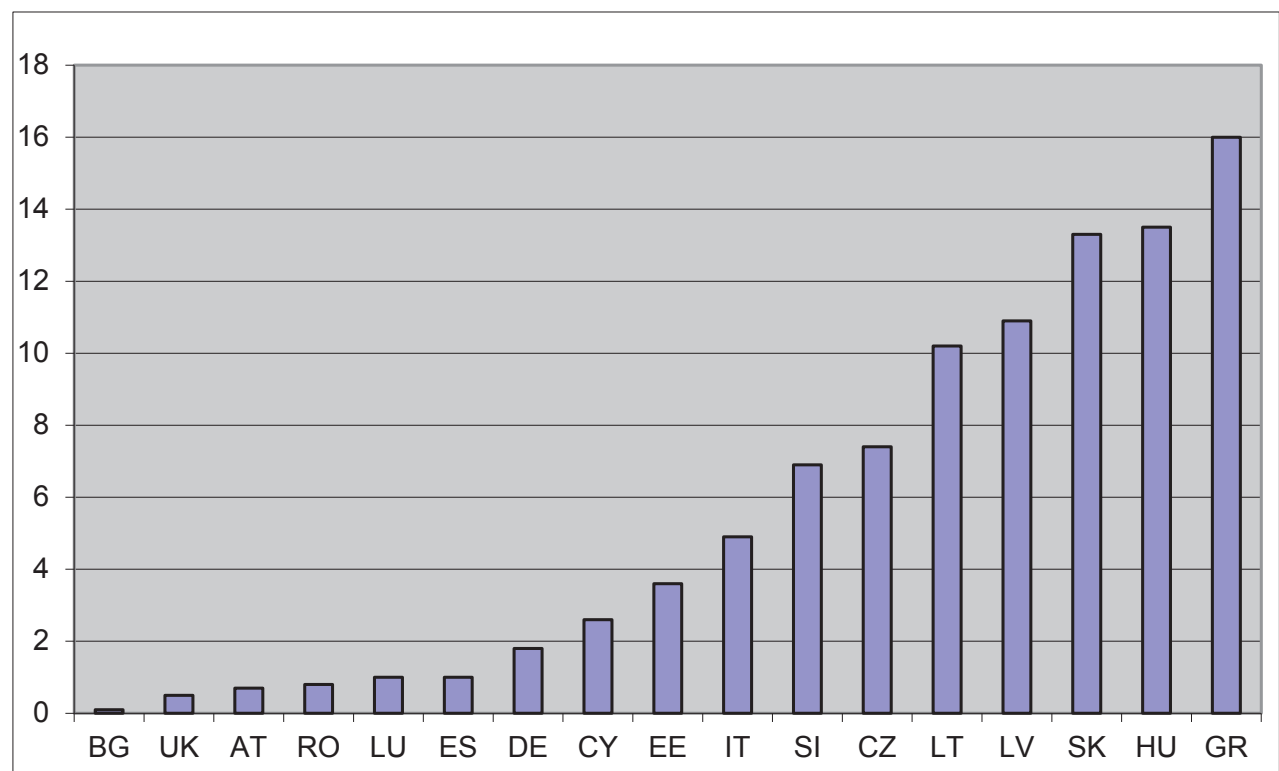
The colours in the table above show ranges of compliance: red: 0% - 20%, orange: >20% - 40%, yellow: >40% - 60%, green: >60 – 80%, blue: >80% - 100%, white: no data or transition period still pending.

## 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



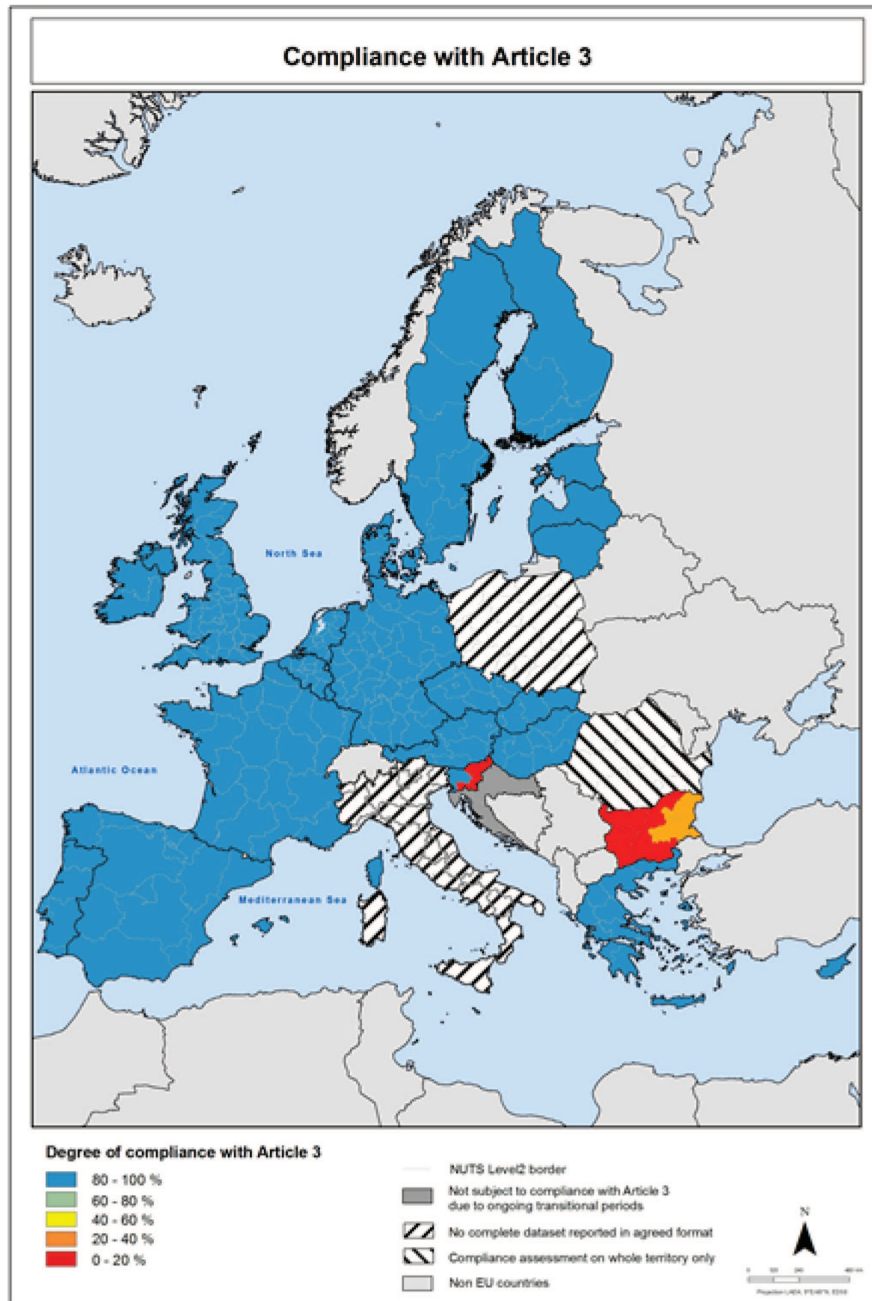
### 1.3- Compliance status of capital cities

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

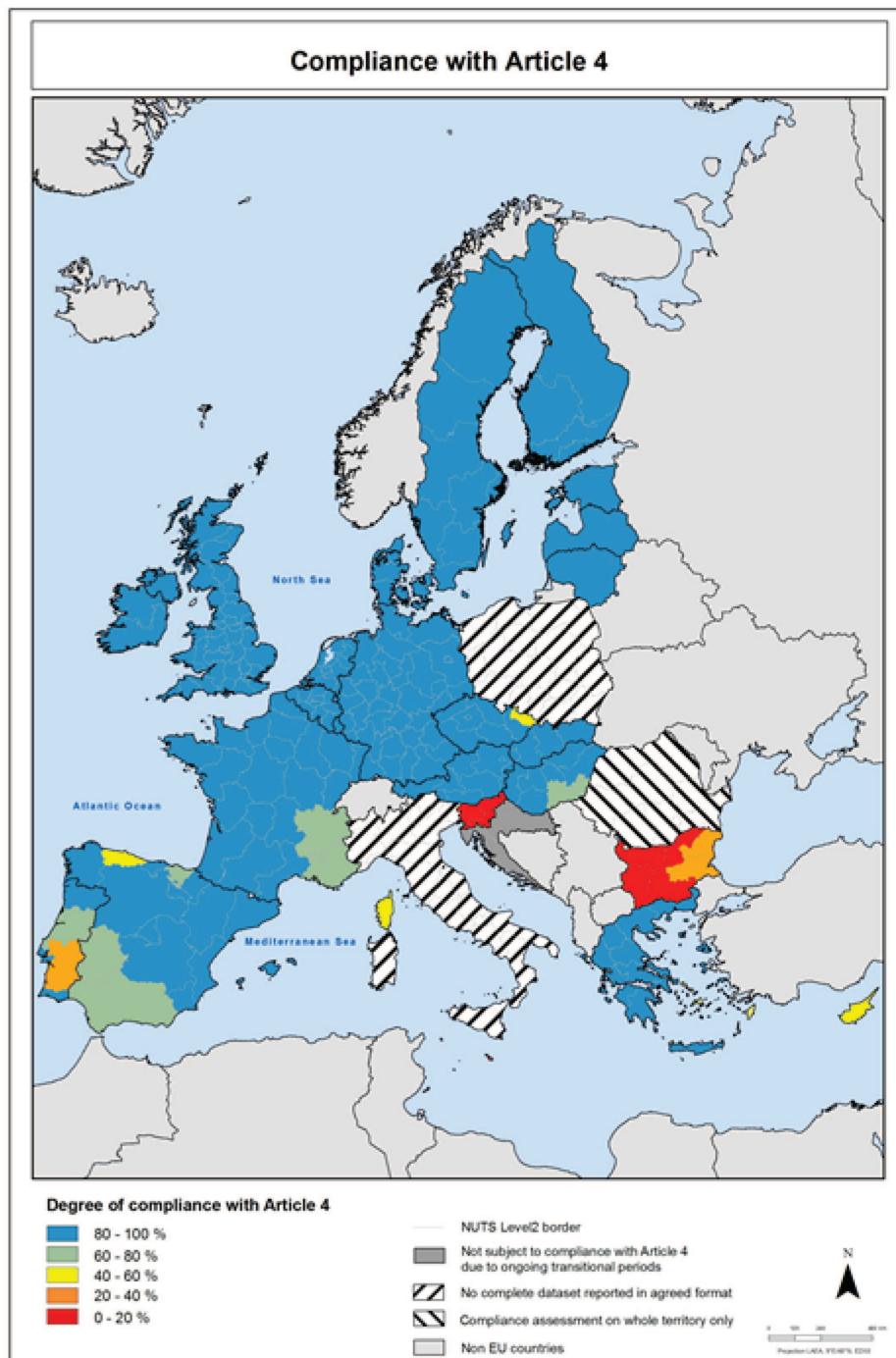
*Compliance status: C = compliance, NC = non-compliance, NR = not relevant as the deadline is not expired yet, either for Article 3, 4 or 5, NA = not applicable as agglomeration is discharging into normal area, NCO = no compliance obligation (in general) and ND = no data available. Compliance with Article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

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

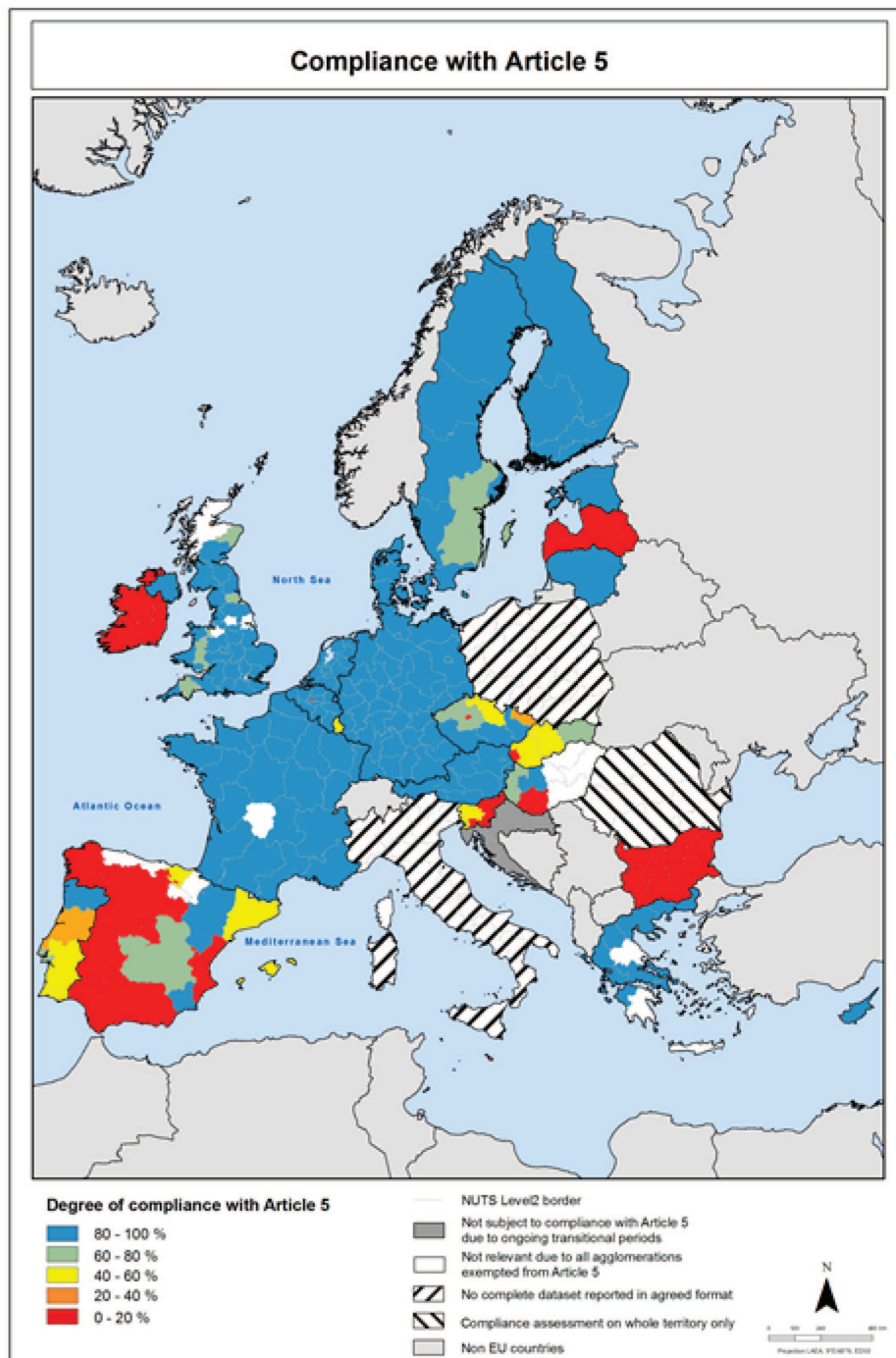
##### 1.4.1- Compliance with the requirements of Article 3 of the Directive on regional level in EU-28 Member States



#### 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<sup>th</sup> 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<br>Commission v<br>United Kingdom  | pending          | Failure to comply with Articles 3, 4 and 10 of UWWT Directive   |
| C-320/15<br>Commission v<br>Greece  | pending          | Failure to comply with Article 4 of UWWT Directive  |
| C-314/15<br>Commission v<br>France  | pending          | Failure to comply with Article 4 of UWWT Directive  |
| C-557/14<br>Commission v<br>Portugal  | pending          | Failure to comply with Case C-530/07 (Article 260 TFEU case)  |
| C-398/14<br>Commission v<br>Portugal  | pending          | Failure to comply with Article 4 of UWWT Directive (52 agglomerations between 2000 and 10000 population equivalent)   |
| C-167/14<br>Commission v<br>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. |
| <a href="#">C-395/13</a><br><a href="#">Commission v</a><br><a href="#">Belgium</a> | 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   |

<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.



|  |            |  |
|--|------------|--|
|  |            | Belgium. The Court decided that Belgium failed to ensure the 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.  |
| <a href="#">C-85/13 Commission v Italy</a>       | 10.04.2014 | 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.  |
| <a href="#">C-576/11 Commission v Luxembourg</a> | 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.                          |
| <a href="#">C-23/13 Commission v France</a>      | 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.  |
| <a href="#">C-533/11 Commission v Belgium</a>    | 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. |

|  |            |  |
|--|------------|--|
| <a href="#">C-517/11 Commission v Greece</a> | 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 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)            |
| 1999/2030   | BE           | 08/07/2004 (C-27/03)<br>17/10/2013 (C-533/11) (Art 260)  |
| 2002/2123   | ES           | Pending (no referral to the Court yet)                   |
| 2002/2125   | LU           | 23/11/2006 (C-452/05)<br>28/11/2013 (C-576/11) (Art 260) |
| 2002/2128   | PT           | 8/09/2011 (C-220/10)                                     |
| 2002/2130   | SE           | 06/10/2009 (C-438/07)                                    |
| 2004/2030   | EL           | 25/10/2007 (C-440/06)<br>(Pending Art 260 - C-167/14)    |
| 2004/2031   | ES           | 14/04/2011 (C-343/10)                                    |
| 2004/2032   | FR           | 07/11/2013 (C-23/13)                                     |
| 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)                                     |

<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:
- treated at an adequate level (secondary or more stringent treatment) as required by the Directive,
- and 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).

<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:

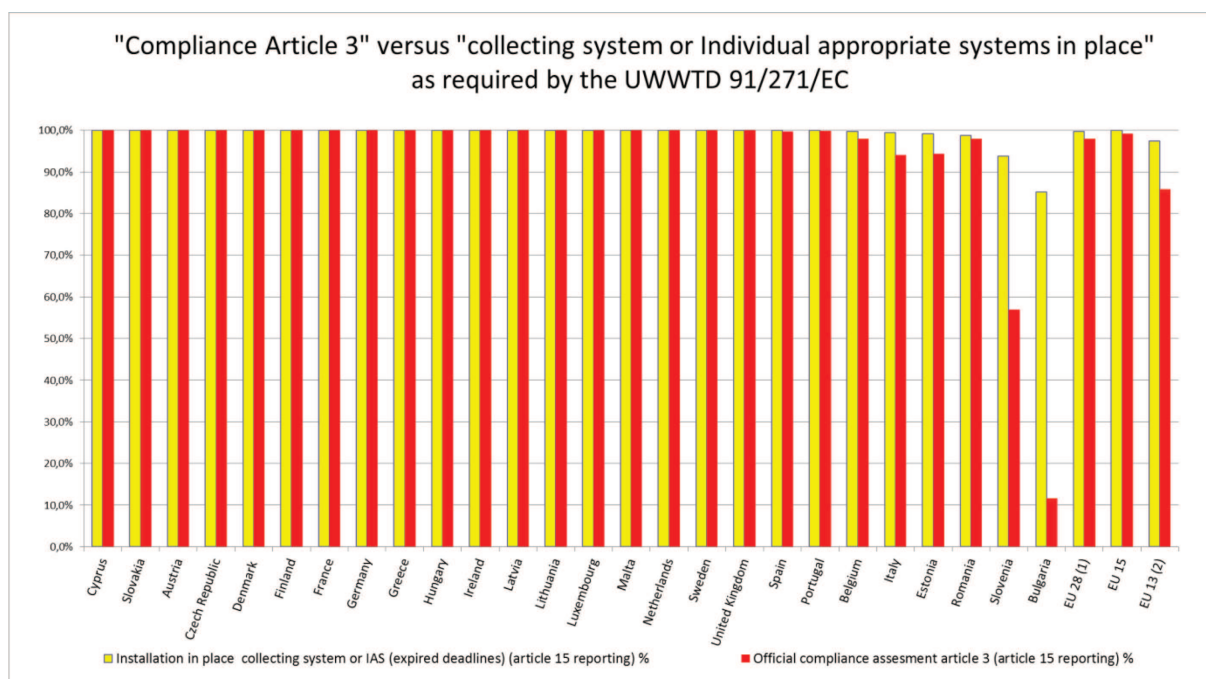
- Comparison between "compliance" and "installations in place in which performance is met" at country level shows that the first concept is much more stringent than the second one and that large differences between both values (low compliance rate versus higher good performance rate in the generated 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:

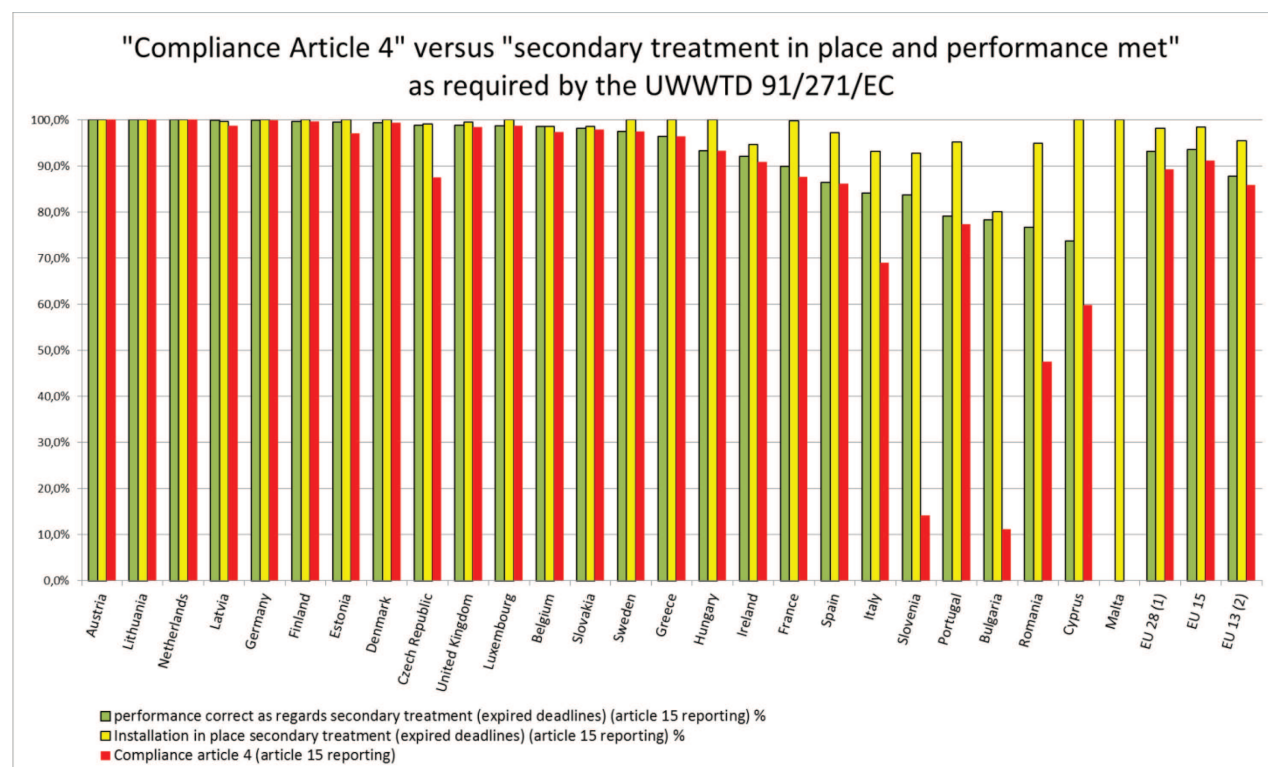
- 14.9% in Bulgaria (88.4% official rate of non-compliance under Article 3, i.e. compliance rate of 11.6%).
- 6.1% in Slovenia (43% official rate of non-compliance under Article 3, i.e. compliance rate of 57%).

### 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<br>Secondary treatment<br>performance not correct<br>(Rate of the total load<br>connected) | Non-compliance under<br>Article 4<br>(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**

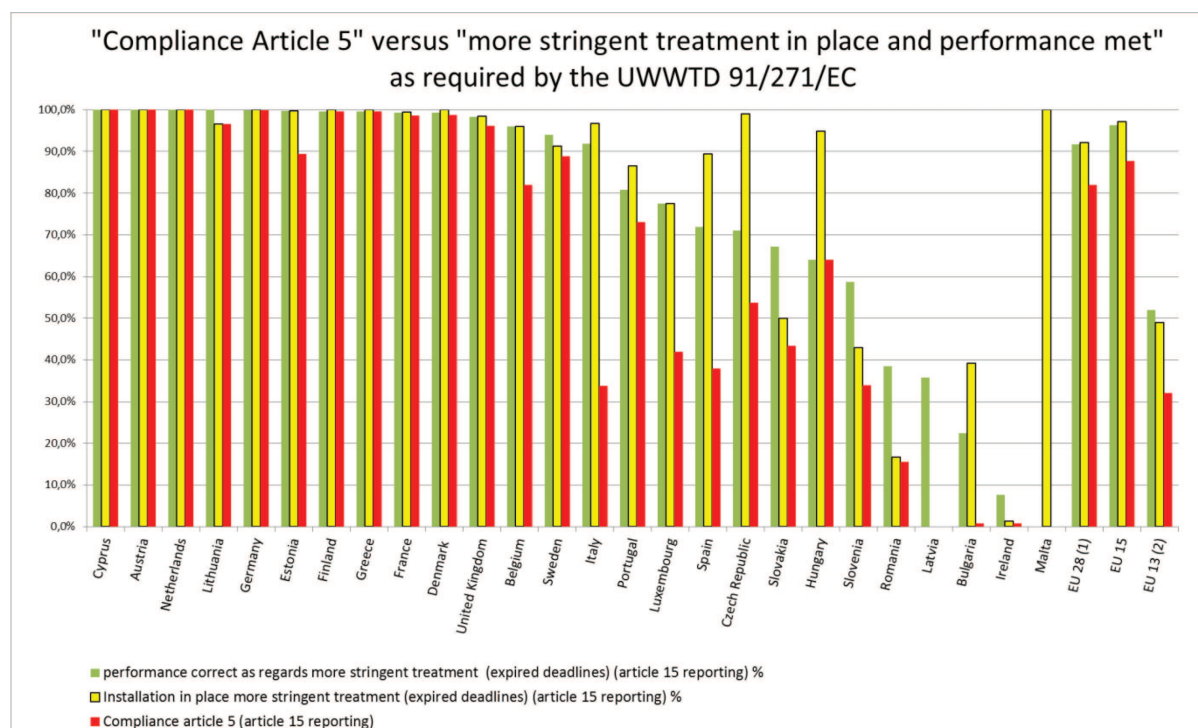
This calculation only looks at the waste water connected that should meet more stringent treatment requirements and performance results<sup>4</sup>.

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>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<br>More stringent treatment<br>performance not correct<br>(Rate of the total load<br>connected) | Non-compliance under Article<br>5<br>(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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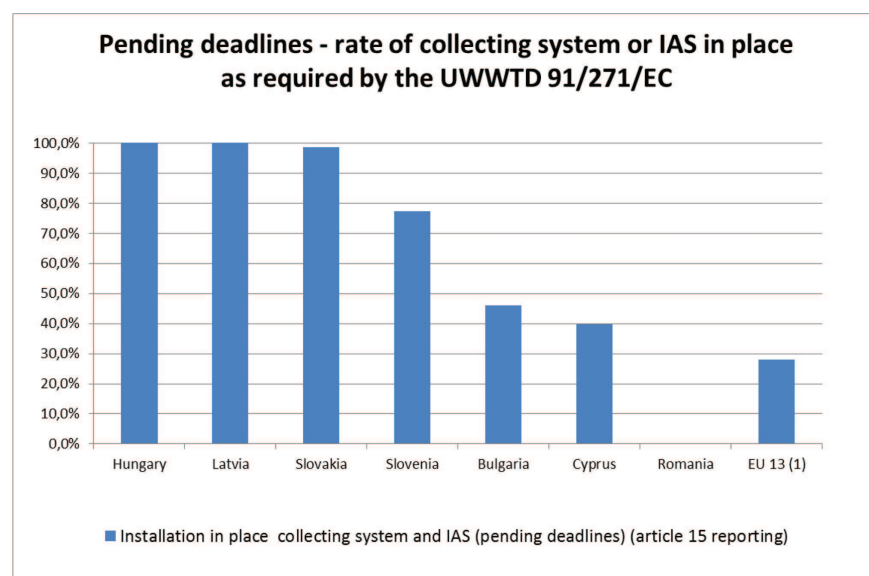
<sup>5</sup> Croatia not considered

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 deadline for Article 3 for those countries will be respected.

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



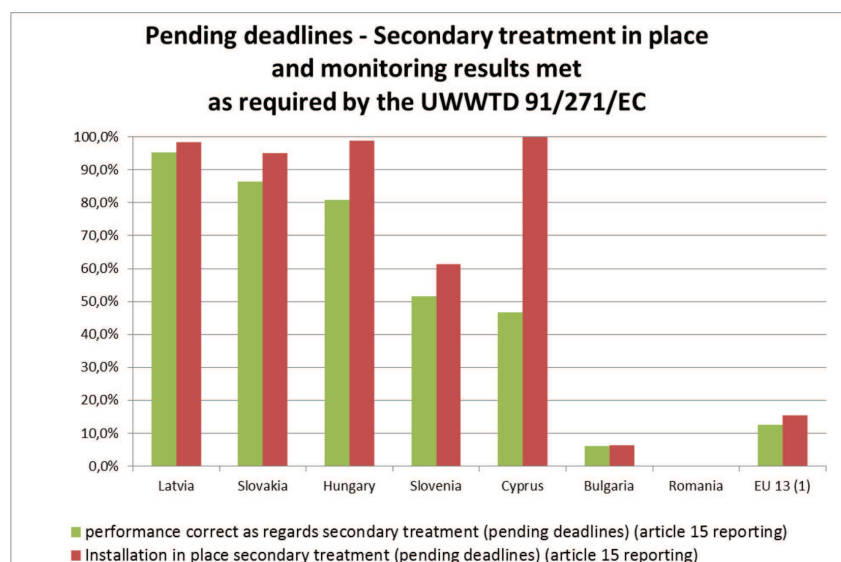
### 3.3.2 - Waste water connected, secondary treatment in place and performance met

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.



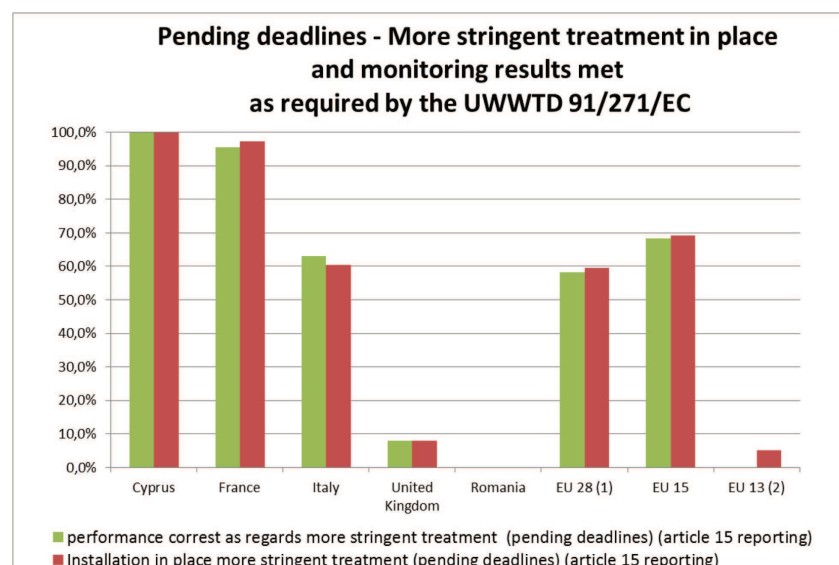


### 3.3.3 - Waste water connected, more stringent treatment in place and performance met

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.

| 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 planned 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  | →                        | →   | →  | →  | →  | →   | →           | →   | →                                     | →   | →           | →                                     | →                                     | →  | →                                     |
| method used for the calculation of current / expected investment                                | 2013 / average 2014-2017 | Flanders (average 2011-2013 / average 2011-2013)<br>Wallonia (average 2010-2014 / average 2015-2021 for UWWTPs)<br>Brussels-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 2019-2018   | 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)                               | 20,267,684               | 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 planned 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 which 82 with more stringent (nitrogen-phosphorus) treatment are planned. | 27 primary, 181 secondary, 61 more stringent nitrogen phosphorus, 16 less than primary | 1 secondary, 12 more stringent microbiology and 1 more stringent other | 10 primary, secondary, tertiary treatment with N and 17 primary, secondary, tertiary 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-microbiology, 64 more stringent nitrogen-phosphorus, 17 more stringent nitrogen-phosphorus-microbiology, 7 more stringent phosphorus, 2 more stringent phosphorus-microbiology, 20 unknown |             | at least secondary                    |                                       | 22 secondary, 5 more stringent microbiology, 6 more stringent NP, 14 more stringent P and 2 more stringent N | Several different types               |
| Population (million) (Eurostat 2014)  | 8.5                      | 11.2  | 7.2  | 4.3  | 0.86   | 10.5  | 5.6         | 1.3   | 5.4                                   | 65.9  | 80.8        | 11                                    | 9.9                                   | 4.6  | 60.7                                  |
| Ratio total investment/population   | 49                       | 26  | 52   | 67   | 66   | 13  | 69          | 12  | 10                                    | 63  | 54          | 23                                    | 47                                    | 64   | 140                                   |

| UWWTD Article 17 assessment   | Latvia                                | Lithuania                             | Luxembourg                            | Malta                                 | Netherlands                           | Poland   | Portugal   | Romania                               | Slovakia  | Slovenia                            | Spain   | Sweden   | United 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                                     |                                       |                                       | 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                                     |                                       |                                       |                                       |                                       | 1018   |  |                                       | 15  | 49                                  |   |  |   | 1,626       |
| Load entering the planned 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                                  |                                       |                                       |                                       |                                       |  | 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  | ↗                                     | ↗                                     | ↗                                     | ↗                                     | ↗                                     | ↗  | ↗  | ↗                                     | ↗   | ↗                                   | ↗   | ↗  | ↗   | ↗           |
| 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 2015-2018 | average 2009-2011 / average 2012-2020 | average 2010-2012 / average 2013-2020 | 2010-2012 / 2013-2015  | average 2012-2017 / average 2018-2017<br>Only funds requested for new operations. Not included renovation of the systems | average 2011-2013 / average 2014-2018 | average 2013-2015 / average 2016-2021   | average 2010-2013/average 2014-2017 | average 2014 / average 2015-2023              | 2012 / 2012  | average 2010-2015 / average 2016-2015   |             |
| 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 planned UWWTP/total generated load                                      |                                       |                                       | 12.1%                                 |                                       |                                       |  | 13.9%  |                                       | 6.8%  | 98.0%                               | 16.6%   | 1.9%   | 4.1%  | 6.9%        |
| Types of treatment WWTP (as planned)  | 3 more stringent Nitrogen-Phosphorus  |                                       | 5 more stringent Nitrogen-Phosphorus  |                                       |                                       | 344 type PUB2, 84 type PUB1, 1 type non PUB2, 42 type non PUB1, 18 type non PUB1, 54 type non B, 24 type BRACK, 1106 Type B and 87 not known | 2 secondary, 51 secondary treatment, 24 more stringent   |                                       | 44 secondary, 24 more stringent (17 nitrogen and 7 nitrogen-phosphorus) and 8 not known | 54 more stringent treatment plants  | Several different types                       | 1 secondary treatment, 9 more stringent treatment (nitrogen) and 3 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         |
| Ratio total investment/population   | 9                                     | 11                                    | 236                                   | 18                                    | 67                                    | 34   | 3  | 37                                    | 23  | 38                                  | 4   | 4  | 22  | 50          |