

Public Consultation on the Evaluation of the Urban Waste Water Treatment Directive (91/271/EEC)

Fields marked with * are mandatory.

Introduction

Introduction to waste water in general

In Europe, we use on average 200 litres of water per person per day. Waste water is produced as sewage from households, tourism, industries and workplaces. Before waste water is discharged into the environment, it is usually collected in sewers and then treated in waste water treatment plants or equivalents to take out harmful substances, as required by the existing EU law. Waste water can contain different types of substances and pollutants, which can cause problems in the environment (such as rivers to which the waste water is discharged and other interlinked water bodies). These pollutants can also affect human health as people come into contact with the water, for instance, through bathing.

In 1991, the European Union adopted the Urban Waste Water Treatment Directive (91/271/EEC) to help improve the management of waste water from households and specific industries (see Annex III of the Directive) across Europe. This law sets out legal obligations to ensure waste water is collected and appropriately treated before being discharged.

It has been 27 years since the Urban Waste Water Treatment Directive was adopted and the European Commission has decided to conduct an evaluation. Essentially the evaluation aims to see whether the law is doing what it is meant to do, whether its objectives are still relevant today, and whether the costs arising from the requirements of the law are justified.

Since 1991, there has been new EU law on water. For example, in 2000 the Water Framework Directive was adopted, and the law on bathing waters and drinking water has also been revised. There have also been technical advances on treatment techniques for waste water, and emerging pollutants have been identified that might require removal. Also, since 1991 the EU has been enlarged from 12 to 28 countries, increasing the total amount of waste water to be collected and treated, and presenting different experiences and challenges in the new Member States (e.g. in Scandinavia, Central and Eastern Europe and the Mediterranean islands).

For more information about waste water management in Europe, please check out these websites:

The European Commission's website about the Urban Waste Water Treatment Directive: http://ec.europa.eu/environment/water/water-urbanwaste/index_en.html

The European Environment Agency's interactive map where you can check out the situation in your country and individual waste water treatment plants: <https://www.eea.europa.eu/themes/water/water-pollution/uwwtd/interactive-maps/urban-waste-water-treatment-maps>

Links to various national sources of information: <https://www.eea.europa.eu/themes/water/water-pollution/uwwtd/links-to-national-water-waste/links-to-national-water-waste>

Introduction to this consultation

The purpose of this consultation is to understand the views of the public on waste water and how it is managed. The consultation is sub-divided into three parts.

Part I: The first part asks for some information about you (such as which country you come from).

Part II: The second part is addressed to the general public. You do not need any specialist knowledge on the law or on waste water treatment to reply to this.

Part III: The third part is addressed to experts and contains more detailed and technical questions.

All of the responses to this consultation will be fully assessed and the overall results will be included in the analysis supporting the evaluation of the Urban Waste Water Treatment Directive. We will also produce a stand-alone summary of the results of the consultation (to be published [here](#)).

If you have any questions, please contact either the European Commission via ENV-URBAN-WASTE-WATER@ec.europa.eu or the project team supporting the Commission's work (UWWTDEVAL@woodplc.com).

Your voice matters and we are grateful to you for taking the time to complete this consultation.

Questionnaire

Part I - Introductory questions

*** I am replying to this questionnaire as a (representative of, where not a private citizen):**

- Private citizen
- Waste Water Treatment Plant operator or association (public)
- Waste Water Treatment Plant operator or association (private)
- Other company or business
- Other private (including trade) association
- Other public association
- Non-governmental organisation (NGO)
- Public authority (municipal level)
- Public authority (regional level)
- Public authority (national level)
- Public Authority (agency)

- European institution / European agency
- Academic/ research institute
- Other (specify below)

In which country do you live most of the year, or is your organisation based?

Please indicate "EU" if representing organisations from across the EU or operating in several EU countries).

Sweden

*

Please provide your full name or the name of the organisation that you are representing:

1500 character(s) maximum

Stockholm University Baltic Sea Centre

If you represent an organisation, is it registered in the EU Transparency Register?

- Yes
- No
- I do not know

*** If yes, what is the EU Transparency Register ID number?**

514687319814-91

In the interests of transparency, organisations, networks, platforms or self-employed individuals engaged in activities aimed at influencing the EU decision making process have been invited to provide the public with relevant information about themselves, by registering in Transparency Register and subscribing to its Code of Conduct.

Please note: If the organisation is not registered, the submission will be published separately from the registered organisations. During the analysis of replies to a consultation, contributions from respondents who choose not to register will be treated as individual contributions (unless the contributors are recognised as representative stakeholders through Treaty provisions, European Social Dialogue, Art. 154-155 TFEU).

If your organisation is not registered, you have the opportunity to register now [here](#).

*** Please provide an email for us to follow-up to your response, if necessary:**

hanna.sjolund@su.se

*** Please indicate below if you want your contribution to remain anonymous:**

Please find on the homepage of this survey the specific privacy statement regarding how your personal data is protected. Please note that regardless of the option chosen your answers may be subject to a request for public access to documents under Regulation (EC) No 1049 /2001. In such cases, the request will be assessed against the conditions set out in the Regulation and in accordance with applicable data protection rules.

Respondents should not include personal data in documents submitted in the context of the consultation if they opt for anonymous publication.

- I give permission for my contribution to be published with my personal information: I consent the publication of all information in my contribution in whole or in part including my name or my organisation's name, and I declare that nothing within my response is unlawful or would infringe the rights of any third party in a manner that would prevent publication.
- My contribution can be published provided that I remain anonymous: I consent to the publication of any information in my contribution in whole or in part (which may include quotes or opinions I express) provided that it is done anonymously. I declare that nothing within my response is unlawful or would infringe the rights of any third party in a manner that would prevent publication.

Part II – General public questionnaire

All of the questions in this part of the consultation are multiple-choice questions. However, there is also the opportunity to make more in-depth comments or provide additional information in response to the last question if you wish.

Your understanding of water, waste water and your relationship with it

We interact with water every day. We drink water, use water in our daily life and we produce waste water. Many of us also enjoy swimming in lakes, rivers or the sea. To enjoy a clean environment and clean waters, it is important that our waste waters are treated before being discharged. These first questions seek to get an appreciation of how you understand your relationship with water, to understand your knowledge on how waste water in your area is being collected and treated, and if you think this is important.

Which of the following do you think are the main sources of pollution to rivers, lakes, and the sea, please provide us a ranking:

	1 - Main source	2- Not so much a source	3- Not a source	I do not know
Households (e.g. waste water from kitchens, bathrooms, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Agriculture (e.g. run-off from fields leading to pesticides, nutrients and manure entering the sewage system)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Industrial sources (e.g. waste water discharges from manufacturing activities etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Urban sources (e.g. waste from the streets such as microplastics from the abrasion of tyres)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you think there are other important sources, that are not mentioned above, please comment here:

1500 character(s) maximum

Do you know how waste water is treated (cleaned) in your area?

- Yes
- I have some idea
- No
- I am not interested in this.

Do you know who treats your waste water?

- A public company
- A private/public company
- A private company
- I have my own individual treatment plant.
- I am not interested in this.
- I do not know

Do you think that waste water is adequately treated in your area?

- Yes
- To some extent
- No
- I do not know
- I am not interested in this.

Which of the following are according to you the benefits of treating waste water before discharging it into the environment?

	To a large extent	To some extent	To no extent	I do not know
Protection of the environment including wildlife	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Clean rivers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Clean seas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Clean bathing areas useable for recreation purposes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Clean drinking water	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Health benefits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reduction of odour	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Removal of pollutants	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Take a moment to compare the benefits of clean rivers, lakes, and the sea you have experienced (if any) to the costs that you pay for water services that partially cover the treatment of wastewater.

Do you think that...:

- the costs outweigh the benefits.
- the costs and benefits are about the same.
- the benefits outweigh the costs.
- I do not know

Are you familiar with the EU Urban Waste Water Treatment Directive?

- I am not familiar with the Directive
- I am slightly familiar with the Directive
- I am very familiar with the Directive

Do you think that EU law on waste water has contributed to the rivers and lakes in your area being less polluted than they were in the past?

- Yes
- To some extent
- The quality has stayed the same.
- No
- I do not know

Collection of waste water

Many households in Europe are connected to sewers that collect waste water, which is then piped to treatment works. Some households, however, have their own systems, such as septic tanks. The questions in this section ask about your connection with the sewage system. Please only answer the questions which apply to you.

Is your household connected to the public waste water collecting system?

- Yes
- No
- I do not know
- Other

Treatment requirements, information to the public and perception of costs

EU law requires different types of waste water treatment. This depends on the size of the population being served by the treatment works, and whether or not the treated waters are discharged into waters that are particularly sensitive to pollution. Treatment includes removal of solid waste items, organic matter (e.g. faeces) and nutrients such as nitrogen and phosphorus, which can negatively affect rivers, lakes and coastal waters.

To have this treatment, water collection and treatment systems have to be built, maintained and operated,

and therefore also to be paid for, including by the users (even if they do not pay the total cost). There are different ways this can be done. For example, households may be charged through water bills or the costs may be included in local taxation or charges.

Information to the public can help create an understanding about the costs of waste water collection, treatment and its management as well as its impact on people and the environment.

The following questions ask for your views about the adequacy of current treatment practices, your current level of information as well as your perception of the costs related to them.

Are you concerned that one or several of the following substances can be found in treated waste water?

	1- Not at all concerned	2	3	4	5- Very strongly concerned	I do not know
Pharmaceuticals (e.g. those excreted when you take medicines)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other household waste (e.g. oil, paint, other household chemicals)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Micro plastics (e.g. fibres released from clothes during washing or particles from worn tyres)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Endocrine disruptors (i.e. substances that contain hormones that affect the development and function of animals and humans)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pesticides (e.g. from using herbicides on your property)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pollutants from industrial installations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you are concerned about one of the above, to what extent would you accept that the additional treatment that might be required to remove these substances may lead to a price increase in your water services bill?

- Absolutely acceptable
- Acceptable if the increase in costs is limited.
- The initial polluter (e.g. industry) should pay for the removal of the pollution.
- Not acceptable
- I do not know

If you wish to comment on the previous question, please do so here:

1500 character(s) maximum

Do you think that you have sufficient information on the following topics?

	Yes, I have sufficient information	No, but I am interested in this kind of information	No, and I am not interested in this kind of information
Information on how my waste water is treated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Information on where my waste water is treated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Information on who is treating my waste water	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Information on where my waste water is discharged	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Information on the costs for treating my waste water	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Information on my costs in comparison to other households in the area	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Information on how the costs are calculated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Information on investments in the treatment and sewer system in my area	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Information on how waste water discharges affect rivers, lakes, seas or the general environment in my area	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The value of having EU law on waste water

The EU Directive is one possible way to address waste water collection and treatment. Another option would be for each Member State to adopt their own law on this issue without an EU legislative framework. When evaluating EU law it is important to check that it adds value to what could be achieved by Member States acting on their own. The following questions explore your views on this.

Do you believe that the improvements since 1991 in waste water collection and treatment, including the construction of related infrastructure, would have happened in your country, region or city without the EU law?

- Yes, they were already in place before the EU legislation.
- Yes, they would have happened anyway.
- Yes, they would have happened anyway, but more slowly.
- Yes, they would have happened anyway but to a lesser extent.
- No, they would not have happened without EU legislation.
- I do not know

Do you think there is still a need for EU law to regulate the collection and treatment of waste water with the objective of protecting the environment?

- Yes
- Only for some aspects (i.e. protection of transboundary waters, achieving high standards across EU for the protection of the environment, sharing practices)
- No
- I do not know

Conclusion

Thank you for spending time completing this questionnaire. Your answers are valuable in helping to understand people's views on this issue.

If you wish to expand on any of your answers or to add comments or information on other aspects relevant to the collection and treatment of waste water in Europe, please do so in the box below.

1500 character(s) maximum

If you would like to submit your replies to the questionnaire at this stage, please go to the end of the expert part and click on the "submit" button. You do not need to fill in the questions in that part.

Part III – Expert stakeholder questionnaire

Introduction to the expert questionnaire

The specific requirements of the Directive are:

- To collect and treat waste water from all agglomerations of more than 2,000 population equivalents (p.e.).
- To apply secondary treatment, addressed to remove organic pollution from all discharges from agglomerations of more than 2,000 p.e., or of more than 10,000 p.e. if they discharge in coastal waters or estuaries.
- To apply more advanced treatment (removal of nutrients or other types such as disinfection) for agglomerations of more than 10,000 p.e. in designated sensitive areas (e.g. where waters are at risk of receiving too high nutrient loads, bathing waters etc.).
- If it is economically infeasible or the establishment of a collecting system does not result in an environmental benefit, individual systems or other appropriate systems which reach a similar level of environmental protection, may be used.
- A requirement for authorisation of all discharges of urban wastewater (such as a permit or license), of discharges from the food-processing industry, and of industrial discharges into urban wastewater collecting systems.
- Storm water overflows: Member States can decide on measures to limit pollution from storm water overflows. These measures can be based on dilution rates or capacity in relation to dry weather flow, or can be to specify a certain number of acceptable overflows per year.

- Re-use of sewage sludge and treated waste water re-use is allowed whenever appropriate.

All significant EU law and policy is subject to evaluation. Evaluation is an analysis of whether the policy is still fit for purpose and still meets today's challenges. The evaluation is structured around five themes:

- **Effectiveness:** Has the Directive achieved what it set out to do? If not, why not?
- **Efficiency:** What are the costs and benefits of implementing the Directive? Are the costs justified? Are the particular requirements cost-effective compared to alternatives?
- **Coherence:** Are the requirements of the Directive consistent with those of other policies? Does any inconsistency cause practical problems?
- **Relevance:** Are the objectives and the way the Directive seeks to deliver these still correct today? Has technology moved on? Are there better solutions available?
- **EU Added Value:** What would have been the outcome without having an EU Directive? What is the justification for having EU law on this issue?

Effectiveness

The analysis of the Directive's effectiveness focuses on whether the main and specific objectives of the law have been reached, in this case, the protection of the environment from urban waste water discharges.

To what extent has the implementation of the UWWTD been effective in achieving the following objectives?

	Very effective	Somewhat effective	Neither effective nor ineffective	Somewhat ineffective	Very ineffective	I do not know
Protecting the environment from adverse effects of urban waste water discharges	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Protecting human health from adverse effects of urban waste water discharges	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Protecting the environment from adverse effects of waste water discharges from certain industrial sectors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Protecting human health from adverse effects of waste water discharges from certain industrial sectors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Promoting continuous improvement of environmental performance of techniques used for urban waste water treatment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Collecting waste waters	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reducing biological oxygen demand (BOD5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reducing chemical oxygen demand (COD)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Removal of Phosphorus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Removal of Nitrogen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ensuring designation of sensitive areas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ensuring a proper application of IAS (Individual or other Appropriate System)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ensuring a proper use of CSO (Combined Sewer Overflow)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Achieving an adequate reporting of the implementation programmes	<input type="radio"/>					
Achieving an adequate management of the implementation programmes	<input type="radio"/>					

To the best of your knowledge, are all the requirements of the Directive effectively implemented and enforced?

- Yes
- No
- I do not know

As far as you are aware, does the implementation of the UWWTD vary across Member States or regions?

(e.g. Does it vary within your country or between neighbouring countries/other countries that you know of?)

- Yes
- No
- I do not know

In general, do you think that the Directive's requirements are:

- Too ambitious
- Very ambitious
- Ambitious
- Somewhat ambitious
- Not ambitious enough
- I do not know

In the following we would like to ask you to rate the barriers to full implementation of the Directive. Please firstly indicate the level at which you would like to rate the barriers:

- EU level
- Member State level
- Local level

Which of the following elements contributed to the achievement of the objectives of the Directive?

Please specify to what extent they had an impact on achieving the objectives.

	Adverse impact	No impact	Some impact	High impact	I do not know
Clarity with regards to the scope of the Directive (e.g. population thresholds, type of pollutants)	<input type="radio"/>				
Clarity with regards to the overall requirements of the Directive to collect waste water	<input type="radio"/>				
Clarity with regards to the overall requirements of the Directive to treat waste water	<input type="radio"/>				
Clarity with regards to the overall reporting requirements by Member States to the European Commission	<input type="radio"/>				

Clarity with regards to specific pollutants controlled by the Directive and related thresholds (BOD5, COD, TSS, Phosphorus and Nitrogen)	<input type="radio"/>				
Clarity with regards to the provision related to individual or other appropriate systems	<input type="radio"/>				
Clarity with regards to the provisions related to storm water overflows	<input type="radio"/>				
Clarity with regards to provisions related to small agglomerations	<input type="radio"/>				
Clarity with regards to the provisions related to sensitive areas (e.g. on designation)	<input type="radio"/>				
Clarity with regards to the provisions related to providing information to the public	<input type="radio"/>				
The European Commission's approach to infringements by Member States	<input type="radio"/>				
The European Union's support to implement the directive (e.g. funding)	<input type="radio"/>				
Other elements	<input type="radio"/>				

If you would like to comment on one of the above, please do so here:

1500 character(s) maximum

Do you have any information on storm water overflows?

- Yes
- No

What is the frequency of overflows in your area?

- At every storm (monthly or more frequent)
- At every major storm (less than 5 times/ year)
- Exceptional (once or twice a year)
- I do not have this information

Do you have a time and/or volume cut off to distinguish between individual spill events and, if so, what are the criteria (e.g. if a spill continues over a longer period is this counted only as one spill)?

- Yes, there is both (time and volume cut off)
- Yes, there is a time cut-off
- Yes, there is a volume cut-off
- No

I do not have this information

What is the share of combined versus separate sewer networks in your region/municipality /country?

Please indicate (xx% combined sewer and xx% separate sewer) as well as the name of your region /municipality/country:

1500 character(s) maximum

What is the typical design dilution rate before overflow?

Please indicate:

1500 character(s) maximum

The dilution rate is defined by the typical flow threshold at which overflow begins, and is the ratio of sewer conveyance to wastewater flow. For instance, in a combined sewer with a wastewater discharge of 100 l/s [liters per second] during dry weather, and a maximum flow above which overflow occurs during storms (i.e., a conveyance) of 500 l/s, the dilution rate is 5.

Do you have any data on overflow frequencies and volumes?

Yes

No

If you have any data or information, please indicate where this information is accessible (i.e. link to website, name of document/study)

1500 character(s) maximum

Alternatively, please upload your information here:

The maximum file size is 1 MB

What are the unintended (positive or negative) consequences of the Directive?

Positive unintended consequences

	have /has occurred	have/has occurred to a certain extent	have /has not occurred	are/is not an unintended consequences	I do not know

Lower costs than expected	<input type="radio"/>				
Incentivised research and development for waste water treatment	<input type="radio"/>				
Increase in skills of workers dealing with waste water management	<input type="radio"/>				
Strong development of the water sector due to the directive	<input type="radio"/>				
Other positive unintended consequences	<input type="radio"/>				

Negative unintended consequences

	have /has occurred	have/has occurred to a certain extent	have /has not occurred	are/is not an unintended consequences	I do not know
Higher costs than expected	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Inappropriate investment (e.g. investments in too small or too large treatment plants)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increased amounts of pollutants in sludge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Decreased nutrient content of sludge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discouragement of continuous technical improvements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other negative unintended consequences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Efficiency

Are you aware of any annual average estimates for the following cost categories of complying with the Directive? These might be costs at water treatment plant level, regional level or country level. Note that we understand some activities are more relevant to operators and some to regulators, so please respond where you can.

Costs in relation to the Urban Waste Water Treatment Directive:

	Costs (please indicate the currency)	Source of information (if available)	Level of the information (WWTP, municipal, regional, national)
Capital expenditure (e.g. building infrastructure for collection and treatment plants)			
Maintenance cost of infrastructure (e.g. renewal of infrastructures)			
Operating costs (e.g. personnel)			
Administrative costs (e.g. keeping records, reporting to competent authorities)			
Costs of monitoring, reporting performance / compliance to Member State authorities			
Costs of enforcing the requirements of the law (e.g. inspection, reporting to the European Commission)			
Costs for providing information to the public			

If you have other information on costs or general comments, please do not hesitate to contact us via ENV-URBAN-WASTE-WATER@ec.europa.eu or fill in the box:

1500 character(s) maximum

Please rate the following scale of (indirect) benefits from the implementation of the Directive:

	0 – adverse impact	1 – no benefit	2 – Little benefit	3 – Some benefit	4 – important benefit	5 – very important benefit	I do not know
Overall reduction of emissions of organic pollution to the groundwater	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall reduction of emissions of organic pollution to surface water	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reduction of nutrients causing eutrophication	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reduced emissions of industrial pollution to water bodies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reduction of microbiological pollution	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reduction of public health problems (e.g. incidents of illness)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improvements in water status (good chemical status)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improvements in water status (good ecological status)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improvements in water status (good ecological status)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improvements in biodiversity in receiving waters	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improved knowledge and subsequent remedial actions from monitoring and reporting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improved public information on the national approach to urban waste water	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improvement of the recreational values of recipient waters (e.g. fishing opportunities, clean bathing waters)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Contributing to functioning ecosystem services (e.g. provisioning of clean water, supporting nutrient cycles, recreational benefits)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Improved availability and quality of treated water for water reuse purposes	<input type="radio"/>						
Improved availability of nutrients through re-cycling of sludge	<input type="radio"/>						
Improved public sanitation and quality of life	<input type="radio"/>						
Improved economic growth and creation of jobs	<input type="radio"/>						
Other benefits	<input type="radio"/>						

To what extent do you agree with the following statements on the justification of costs and benefits of this Directive requiring, amongst others, collection systems and adequate treatment?

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	I do not know
The costs involved in relation to the Directive are justified given the benefits that have already been achieved	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The costs involved in relation to the Directive are justified given the benefits that will be achieved in the short term	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The costs involved in relation to the Directive are justified given the benefits that will be achieved in the long term	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When considering the administrative cost, the costs are justified compared to the benefits achieved	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Further simplification of the law is possible (e.g. reducing treatment requirements and consequently costs, or monitoring and reporting requirements)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Further optimisation of the law is possible (i.e. gaining additional benefits from a similar level of costs for example by including some pollutants that could be removed at the same time than those specified in the law)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stronger links could be made with technical progress and innovation (e.g. requiring continuous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

improvement of environmental performance reflecting technological progress)						
The costs arising from the UWWTD, including renewal of infrastructure costs, have decreased over time	<input type="radio"/>					
The benefits from the UWWTD have increased over time	<input type="radio"/>					

If you would like to provide further information on one of the statements above, please do so here:

1500 character(s) maximum

The focus of the UWWTD is primarily nutrients and organic material, however other pollutants (i.e. organic chemicals of human origin or design, heavy metals, microplastics) are also removed to a large extent via the conventional treatment processes. UWWTPs are thus important filters between the urban environment and the aquatic environment for many waterborne chemical pollutants.

The directive does provide an important benefit for improvements in water status – if you look at it from the perspective of how good chemical status is defined today, with its limited range of measured chemicals under the WFD.

For certain water-soluble and stable chemicals, however, the removal in conventional UWWTPs is low. As such, in a revised UWWTD, targets for improved additional treatment steps specifically targeting these types of substances should be included.

Have the observed results been achieved in an efficient manner?

	Yes	No	I do not know
Results for collecting urban waste water	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Results for treating urban waste water to a sufficient level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Results for complying with the threshold values	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Are you aware of any problems relating to the financing and management of investments for the implementation of the Directive (e.g. building of sewerage collection systems or treatment plans)?

- Yes
- No
- I do not know

In your Member State/ region/ municipality, are you aware of other type of funding / loan (e.g. funding from international institutions) available to support the implementation of the Directive?

	Yes, funding was available	No, I am not aware of any funding	Not applicable
Member State / national level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Regional level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Municipal level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Are the costs of complying with the Directive affecting the affordability of water services?

- Yes
- No
- I do not know

Relevance

The analysis on relevance focuses on whether the needs and the objectives of the Directive are aligned. That is to say, whether the specifications of the UWWTD are still relevant today in achieving its objectives of protection of the environment from the adverse effects of waste water discharges.

Are you aware of any problems/issues related to urban waste waters including their impact on the environment that the Directive does not address?

- Yes
- No
- I do not know

If yes, please specify:

1500 character(s) maximum

Micropollutants. The UWWTD in its current form does not sufficiently address the issue of UWWTPs being important land-to-sea transport routes for micropollutants such as pharmaceuticals, industrial chemicals and pesticides. More than a 1000 chemicals that are rarely monitored, but known or suspected to cause adverse ecological effects, have been identified in European waters. Almost half of the European freshwater bodies have been identified as likely threatened by chronic long-term effects on sensitive aquatic organisms. Many of these chemicals enter the aquatic environment via UWWTPs as these facilities comprise one of few collection points for chemical flows in our society.

This provides for an opportunity to remove a large fraction of known and unknown contaminants from the water cycle by upgrading treatment techniques to remove a broad range of chemicals emitted from human activities.

Do you think the Directive is sufficiently flexible to be integrated with urban planning policies?

- Yes
- No

I do not know

How relevant are the provisions of the Directive to the management of urban waste water in dispersed population or small rural communities?

- To a large extent
- To some extent
- To no extent
- I do not know

To what extent do you agree with the following statements?

	To a large extent	To some extent	To no extent	I do not know
Biological oxygen demand (BOD5) is still valid as a parameter	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The limit value for BOD5 is still accurate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chemical oxygen demand (COD) is still valid as a parameter	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The limit value for COD is still accurate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Total suspended solids (TSS) is still valid as a parameter	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The limit value for TSS is still accurate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nitrogen is still valid as a parameter	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The limit value for nitrogen is still accurate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Phosphorus is still valid as a parameter	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The limit value for phosphorus is still accurate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To what extent do you agree with the following statements?

	To a large extent	To some extent	To no extent	I do not know
The end of pipe approach for the collection and treatment of urban waste waters is still appropriate.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The objectives of the Directive addresses environmental protection as well as human health.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
The analytical methods set out in the directive are still appropriate.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The monitoring requirements of the Directive are adequate.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The provisions related to IAS are still appropriate.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The provisions related to information to the public are sufficient and transparency is ensured.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The provisions related to reporting to the European Commission are clear.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The biennial report by the European Commission on the implementation of the directive is useful, even if reported data are published 2-3 years later.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There are no gaps in the scope of the UWWTD (e.g. pollutants, thresholds).	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
There are no obsolete / unnecessary provisions in the UWWTD.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The UWWTD promotes research and development.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The UWWTD encourages innovation and adaptation the uptake of the best available techniques.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
The UWWTD allows for new / emerging pollutants to be considered.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
The UWWTD efficiently promotes the re-use of sludge.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
The UWWTD allows for effective management of sludge.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The UWWTD is compatible with the application of the circular economy principles (reduce, re-use, recycle) in the EU. (http://ec.europa.eu/environment/circular-economy/index_en.htm)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

The UWWTD promotes the uptake of an integrated approach to the management of water quality and quantity.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The UWWTD promotes the uptake of nature-based solutions (e.g. green roofs, riparian buffer strips).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The UWWTD is compatible with the commitment to achieving the Sustainable Development Goals by 2030.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
The UWWTD promotes sustainable approaches such as phosphorus and nitrogen recycling.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The UWWTD promotes safe waste water reuse.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The UWWTD allows the possibility to deal with storm water overflows in an efficient manner.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you would like to comment on any of the above, please do so here:

1500 character(s) maximum

End of pipe: Upstream measures for single chemicals may not result in emission reductions that suffice to reduce environmental levels below relevant toxicity thresholds, such as EQS. Certain chemicals such as pharmaceuticals are also difficult to regulate on environmental grounds as they have invaluable benefits for humans. End-of-pipe measures are needed as a complement to upstream reductions of unwanted chemicals entering sewers as a precautionary measure that protects aquatic environments.

R&D/innovation+BAT: The UWWTD does not encourage innovation of advanced wastewater treatment technology. A revised directive offers the opportunity to spur innovation and a market for green technology. A small number of UWWTPs treat a relatively large fraction of all wastewater produced, and costs and energy demand of advanced wastewater treatment technologies per m³ are lower for large facilities.

New pollutants: WWTPs are major collection points for chemical flows in society and important transport routes for many substances regulated in recipients. The UWWTD does not entail any mechanism for early warning, link to other policy/law that would trigger assessment of emerging pollutants in wastewater. A revised directive should allow for legislation covering micropollutants in receiving water bodies to feed back to the monitoring/screening/technology requirements of UWWTs.

Sludge & water reuse: Safe reuse is hampered due to uncertainty regarding present chemicals.

Coherence

The aim of these questions is to assess the extent at which the UWWTD is coherent and articulated appropriately with other EU policies and interventions.

To what extent are the provisions and requirements within the UWWTD coherent with each other and linked to each other, if needed?

- To a large extent
- To some extent
- To no extent
- I do not know

Do you wish to explain your response?

1500 character(s) maximum

Do you think the Directive is clearly drafted?

- To a large extent
- To some extent
- To no extent
- I do not know

If any aspects of the Directive are in your opinion unclear or missing, please indicate which ones and why:

1500 character(s) maximum

To what extent is the UWWTD coherent with the following EU water law?

Please add comments to explain your responses in the 'comment' section below.

	To a large extent	To some extent	To no extent	I do not know
Water Framework Directive	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Groundwater Directive	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Environmental Quality Standards Directive	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Floods Directive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bathing Water Directive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drinking Water Directive	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nitrates Directive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sewage Sludge Directive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Marine Strategy Framework Directive	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Industrial Emissions Directive	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
European Pollutant Release and Transfer Register	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (please comment below)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you would like to comment on any of the above, please do so here:

1500 character(s) maximum

A lack of policy coherence in EU's water-related legislation has been highlighted in recent years. The UWWTD needs to be part of the solution to fulfil and reach the targets under both the current and future WFD and its daughters + EQS-directive, and MSFD. UWWTDs are important entry routes for some, but not all, priority substances. These links should be better addressed in the UWWTD, e.g. by setting higher basic requirements on wastewater quality to better reflect current and future targets for chemical pollution of the aquatic environment.

To what extent is the UWWTD coherent with the following EU environmental policies?

Please add comments to explain your responses in the 'comment' section below.

	To a large extent	To some extent	To no extent	I do not know
Birds and Habitats Directives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pesticides Framework Directive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Circular economy strategy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(http://ec.europa.eu/environment/circular-economy/index_en.htm)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Policies on endocrine disruptors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Environmental Impact Assessment Directive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strategic Environmental Assessment Directive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sustainable development goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Energy Efficiency policies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Greenhouse Gas emissions reduction policies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Climate change adaptation policies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (please comment below)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you would like to comment on any of the above, please do so here:

1500 character(s) maximum

Two EU strategies are missing here: The strategic approach to pharmaceuticals in the environment, PIE, (announced for 2015) and the strategy on a non-toxic environment (announced for 2018). It is regrettable that these are not mentioned here. Policies on endocrine disruptors is mentioned even though the strategy on EDC has not yet been published. The two missing strategies are both highly relevant to the issue of micropollutants and wastewater treatment.

For PIE it must be said that pharmaceuticals are difficult to regulate on environmental grounds as they have invaluable benefits for humans. They are also often poorly removed as many are by design highly water-soluble compounds that are resistant to biodegradation. This problem is foreseen to increase as with an ageing European population, ever more pharmaceuticals will be consumed. By imposing chemical limit values or advanced technology requirements on outgoing water from WWTPs in large agglomerations, chemical emissions could be significantly decreased.

EU added value

The aim of the questions is to gain an understanding of whether there are identifiable benefits to the fact that the law is at EU level compared to law at Member State level and whether action at EU level remains justified.

What is the additional value from adopting law on waste water at EU level as opposed to what could be achieved at national/regional level?

Please add comments to explain your responses in the 'comment' section below.

	High additional value	Some additional value	Little additional value	No additional value	I do not know
Better waste water treatment	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ensuring the delivery of improved collection and/or treatment of waste water	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cleaner rivers, lakes, and seas	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Harmonisation of approaches	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Easier to access financing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enhanced comparability collection and treatment levels across Member States	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Faster implementation due to risk of financial sanctions at EU level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Facilitating the compliance of other EU environmental Directives and policies	<input type="radio"/>				
Other (please comment below)	<input type="radio"/>				

If you would like to comment on any of the above, please do so here:

1500 character(s) maximum

From a Baltic Sea perspective with eight EU Member States having a coastline to it and being in the catchment area, EU level legislation in this area is crucial for the well-being of the sea. To give an example, out of the 615 WWTPs close to the Baltic Sea coast, 45 plants receive wastewater from more than 100 000 p.e. and together treat wastewater from almost 70% of the coastal population. Upgrading these large WWTPs with advanced treatment technologies would on average remove 70-80% of the micropollutants in outgoing water, reducing the total load from all coastal WWTPs by approximately 50%. This measure thus has potential to significantly lower concentrations of a wide range of micropollutants in seawater. This is particularly important for persistent and water soluble chemicals since they easily escape conventional WWTPs, spread in waterways and accumulate in aquatic “end-stations” such as the Baltic Sea.

To what extent do the issues addressed by the UWWTD continue to require law at EU level?

- To a large extent
- To some extent
- To no extent
- I do not know

What would be the most likely consequences of stopping or withdrawing the existing UWWTD?

- Negative impacts
- No impacts
- Positive impacts
- I do not know

If you wish to explain your response, please do so here:

1500 character(s) maximum

Final questions

If you wish to expand on any of your answers or if you wish to add comments or information on anything else, which is relevant to the collection and treatment of waste water in Europe, please do so here:

1500 character(s) maximum

If you consider there are materials / publications available online that should be considered by us in this evaluation exercise please feel free to describe them (title and author) in the box and include any relevant links:

1500 character(s) maximum

Contact

ENV-URBAN-WASTE-WATER@ec.europa.eu
