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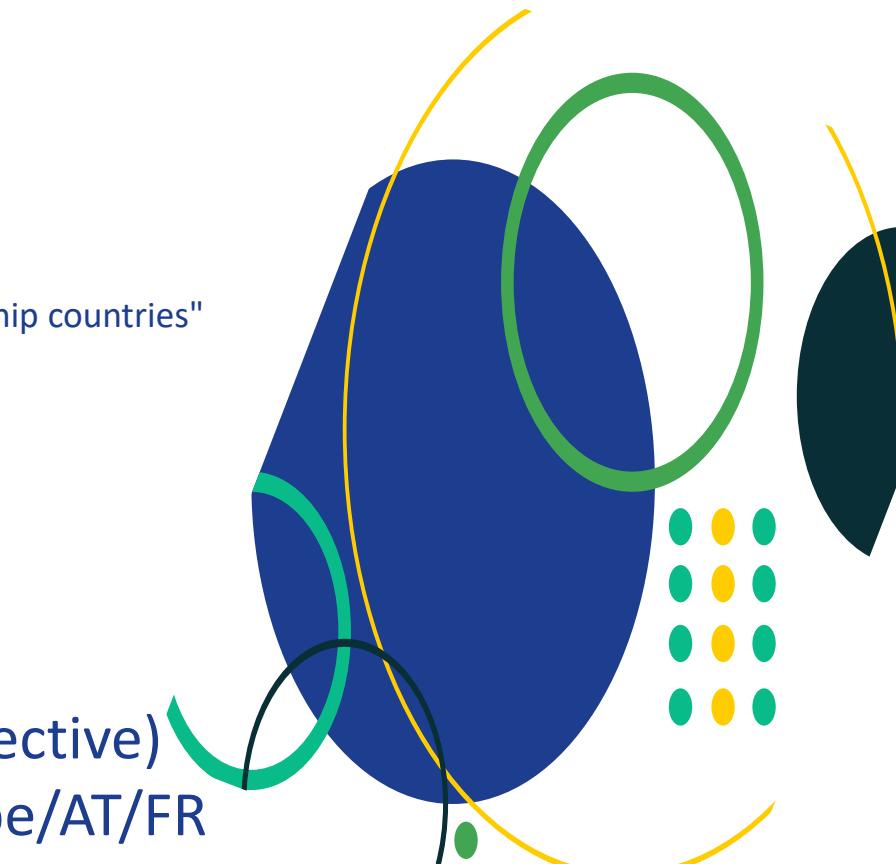
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RECOVERY  
EAST

# EU 4 GREEN RECOVERY EAST

Official title: "Recovery through a Circular Economy and Pollution Reduction in the Eastern Partnership countries"

**Webinar: Implementation of the old and new UWWT Directive. 11 December 2025**

- Objectives and current status of implementation of  
**Directive 91/271/EEC (Urban Wastewater Treatment Directive)**  
in Europe/AT/FR



Implementing partners:

umweltbundesamt<sup>①</sup>  
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# DIRECTIVE 91/271/EC - EU

## Goal

- Protecting the environment from the harmful effects of urban wastewater
- Collection, treatment and discharge of urban wastewater, treatment and discharge of biodegradable industrial waste water from food industries

## Content

- Designation of urban wastewater **agglomerations**
- Designation of **sensitive areas** (criteria: eutrophic, use for drinking water abstraction, other directives)
- Wastewater **collection** – Art. 3: agglomerations  $\geq 2,000$  PE (population equivalents)
- Secondary treatment – Art. 4: **Carbon removal** in agglomerations  $\geq 2,000$  PE
- Tertiary treatment - Art. 5: **Nutrient removal** in agglomerations  $> 10,000$  PE discharging into sensitive areas

Implementing partners:



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## Implementation deadlines

### EU-15 (EU Member States since 1990ies)

- Agglomerations > 10,000 PE in sensitive areas → 1998
- Agglomerations > 15,000 PE in „normal“ areas → 2000
- All agglomerations  $\geq$  2,000 PE → 2005

### EU-12 (EU Member States since 2000ies)

- Individual implementation deadlines for agglomerations of different sizes set in accession negotiations
- Last deadline: Romania (2018)

### Croatia (EU Member States since 2013)

- Implementation deadline 2023

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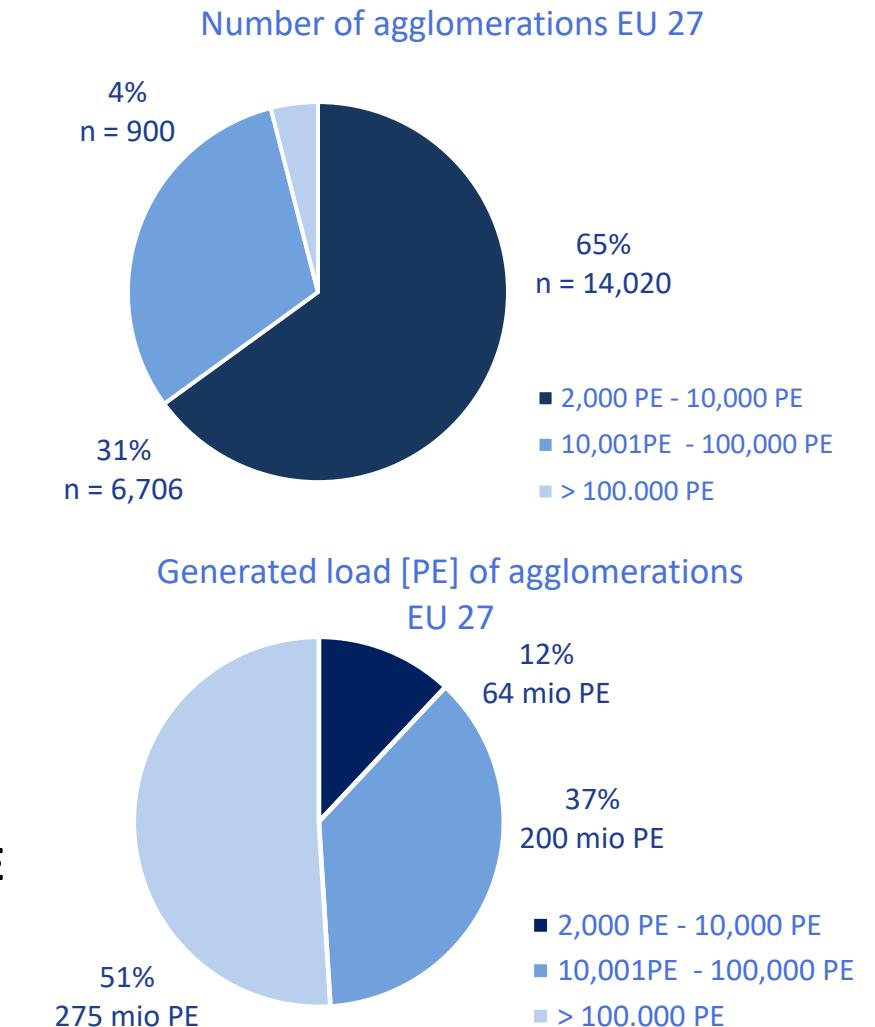
### Current status of implementation - Agglomerations

#### Requirement:

- Agglomeration: an area where the population and/or economic activities are sufficiently concentrated for urban wastewater to be collected and conducted to an urban wastewater treatment plant (UWWTP) or to a final discharge point

#### Status quo (2020):

- **21,600** agglomerations  $\geq$  2,000 PE: generated load: **538 mio PE**
- Population: 447 Mio inhabitants



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### Current status of implementation - Collection (Art. 3)

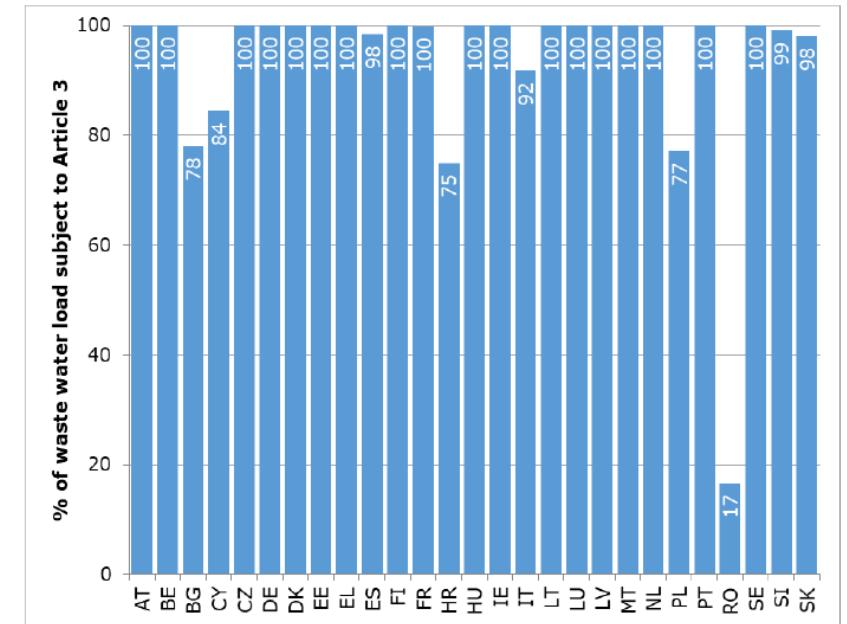
#### Requirement:

- Collect wastewater from agglomerations in **sewers**
- **Exemption:** if sewers do not benefit the environment/involve excessive costs → **individual systems** (IS) with the same level of environmental protection
- Agglomerations **compliant**, if at least **98%** of the generated wastewater is collected in sewers and IS

#### Status quo (2020):

- **High compliance rate**, but:
- 1,203 agglomerations without wastewater collection (7 Mio PE)
- 1,059 agglomerations with wastewater collection in sewers, but without wastewater treatment plants (5 Mio PE)

Compliance Art. 3 per Member State (% of wastewater load)



Source: [EC \(2024\). 12<sup>th</sup> technical assessment of UWWTD implementation](#)

Implementing partners:



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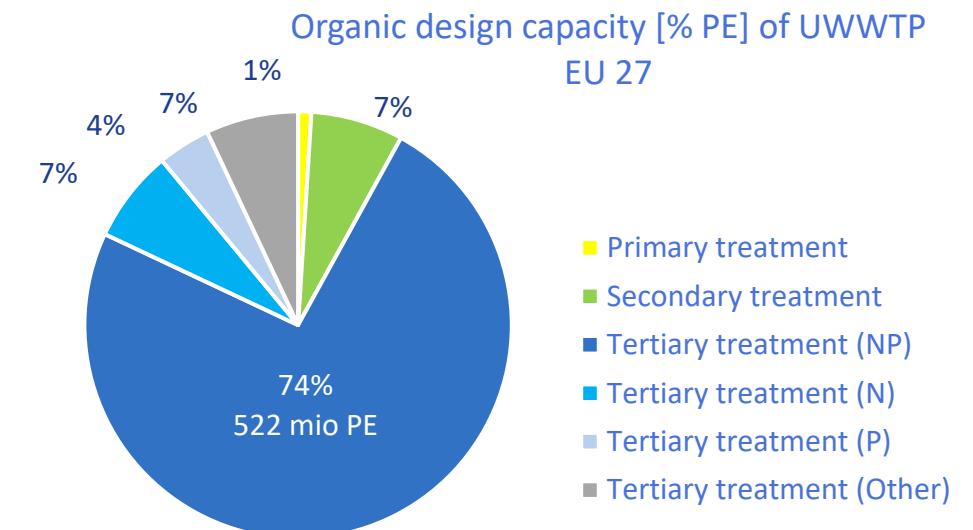
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### Current status of implementation - Treatment (Art. 4 and Art. 5)

#### Status quo (2020):

- 21,400 UWWTP (Organic design capacity: 702 mio PE)
- Wastewater load from agglomerations (538 mio PE) = 77% of the organic design capacity
- 74% of UWWTP with nitrogen(N)- and phosphorus (P)-removal



Source: [EC \(2024\). 12<sup>th</sup> technical assessment of UWWTD implementation, Country profiles on urban waste water treatment |](https://ec.europa.eu/eurostat/documents/2018/12/12th_technical_assessment_of_UWWTD_implementation_Country_profiles_on_urban_waste_water_treatment_en.pdf)

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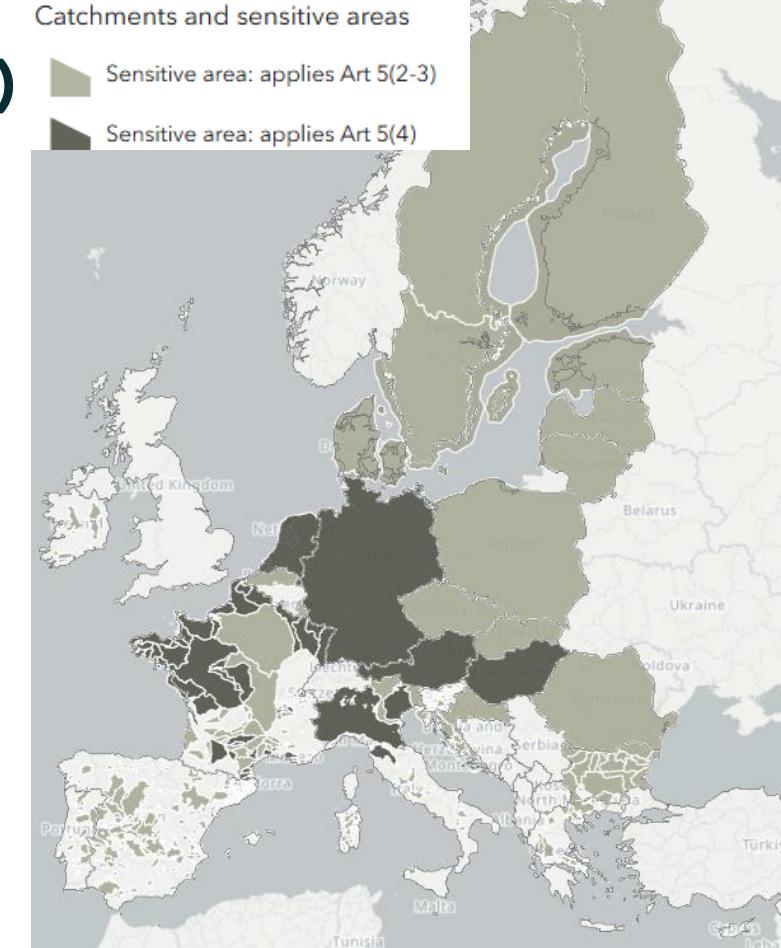
## Current status of implementation – Sensitive areas (SA)

### Requirement:

- Art. 5(1): Designation sensitive areas
- Art. 5(2,3): Tertiary treatment for agglomerations > 10,000 PE
- Art. 5(4): min. 75% removal of  $N_{tot}$  and  $P_{tot}$  in an area → Tertiary treatment not required for each agglomeration > 10,000 PE
- Art. 5(8): If a Member State applies tertiary treatment for all agglomerations > 10,000 PE → sensitive areas not required

### Status quo (2020):

- 74% of EU27-area require tertiary treatment
- Baltic Sea, parts of Black Sea, Danube delta, north Adria are SA → tertiary treatment required in catchment of SA



Quelle: [EEA. Urban wastewater treatment map](#)

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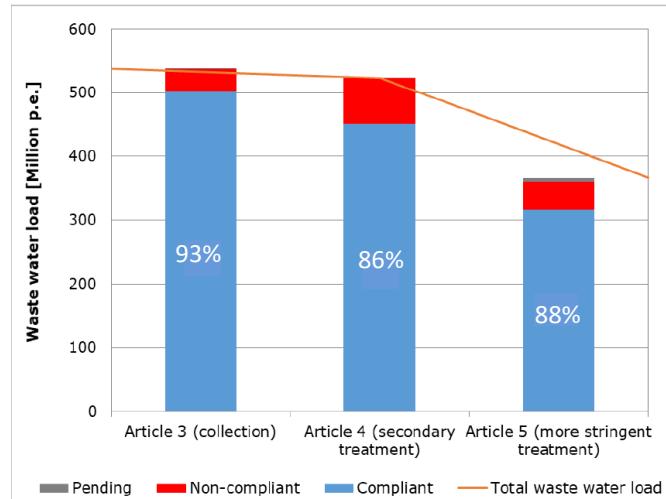


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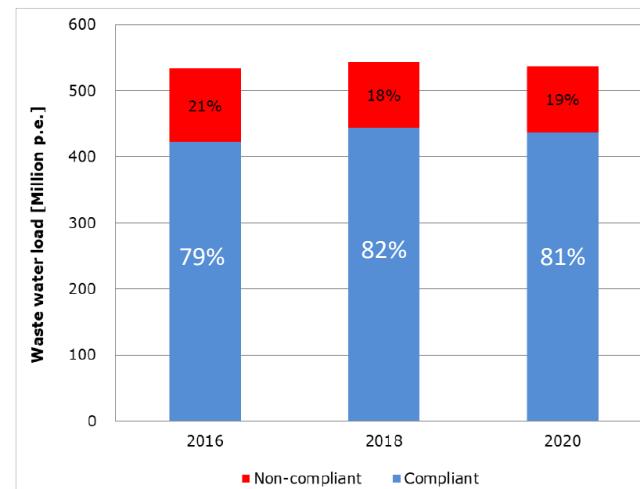
## Current status of implementation

### Status quo (2020):

Collection (Art. 3), Secondary treatment (Art. 4),  
Tertiary treatment (Art. 5)



### Compliance 2016 - 2020



- Some capitals with > 1 mio inhabitants are not yet compliant (e.g. Budapest, Warsaw, Dublin, Bucharest, Prague, Sofia)

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Member State	Legal compliance rate 2020			
	Collection (Article 3)	Secondary treatment (Article 4)	More stringent treatment (Article 5)	Collection and treatment
AT	100%	100%	100%	100%
BE	100%	100%	95%	95%
BG	78%	38%	70%	31%
CY	84%	85%	100%	84%
CZ	100%	96%	73%	78%
DE	100%	100%	100%	100%
DK	100%	100%	100%	100%
EE	100%	100%	99%	99%
EL	100%	98%	100%	98%
ES	98%	88%	82%	86%
FI	100%	100%	96%	97%
FR	100%	92%	92%	91%
HR	75%	11%	9%	7%
HU	100%	57%	55%	59%
IE	100%	51%	27%	47%
IT	92%	79%	93%	56%
LT	100%	100%	99%	98%
LU	100%	100%	100%	99%
LV	100%	100%	98%	100%
MT	100%	6%	0%	6%
NL	100%	100%	100%	100%
PL	77%	76%	70%	71%
PT	100%	90%	76%	82%
RO	17%	15%	22%	15%
SE	100%	100%	97%	97%
SI	99%	63%	53%	58%
SK	98%	97%	96%	94%
EU-27	93%	86%	88%	81%
EU-14	98%	92%	91%	87%
EU-13	73%	61%	60%	56%

Source: EC (2024). 12<sup>th</sup> technical assessment of UWWTD implementation



# DIRECTIVE 91/271/EC - EU

## Costs

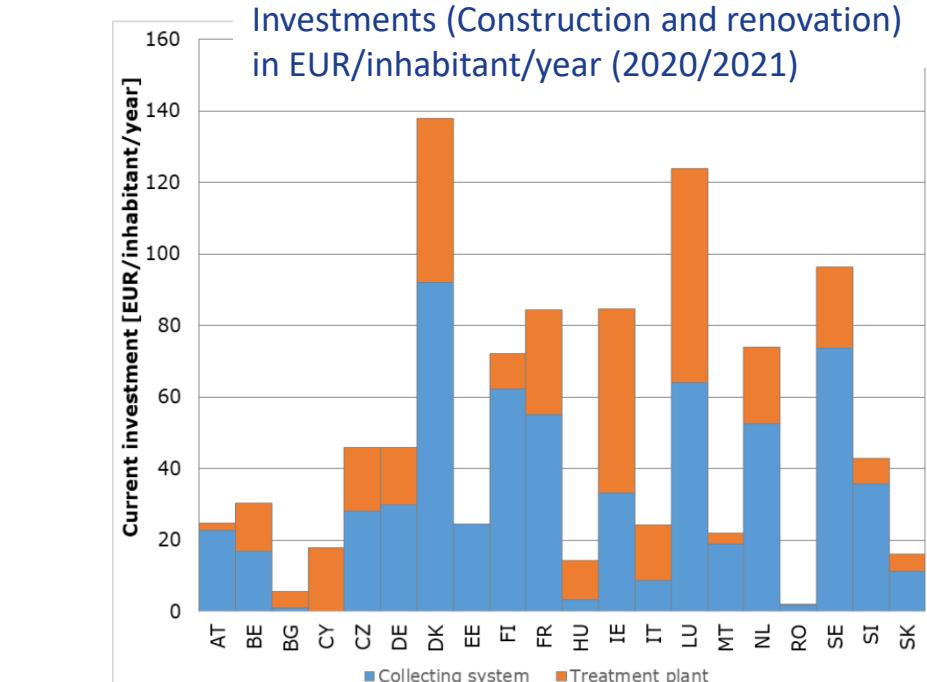
- Costs for implementation evaluated during UWWT- evaluation in 2018: appr. **18 billion EUR/a**

[Billion EUR/a]	Sewer system	UWWTP
CAPEX	7,5	4,8
OPEX	3,6	2
<b>Total</b>	<b>11,1</b>	<b>6,8</b>

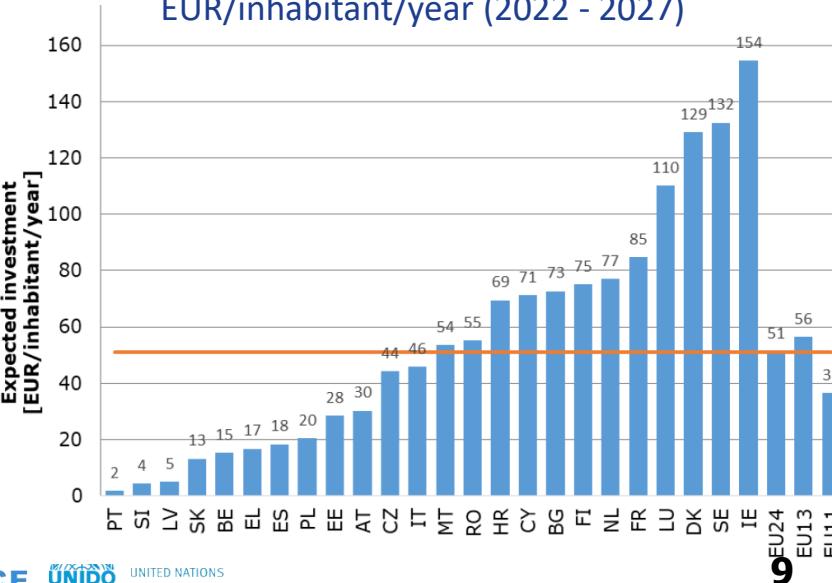
- Total costs (**1991 – 2014**): appr. **412 billion EUR**
- Support from EU cohesion fund in the period 2000 – 2020: appr. 39 billion EUR
- OECD estimates: around **255 billion EUR** in additional investment between 2020 and 2030 to **reach and maintain full compliance**

Source: [EC \(2019\). Evaluation of the Council Directive 91/271/EEC of 21 May 1991, concerning urban waste-water treatment. SWD/2019/0700](#), [EC \(2024\). 12<sup>th</sup> technical assessment of UWWT implementation](#)

Implementing partners:

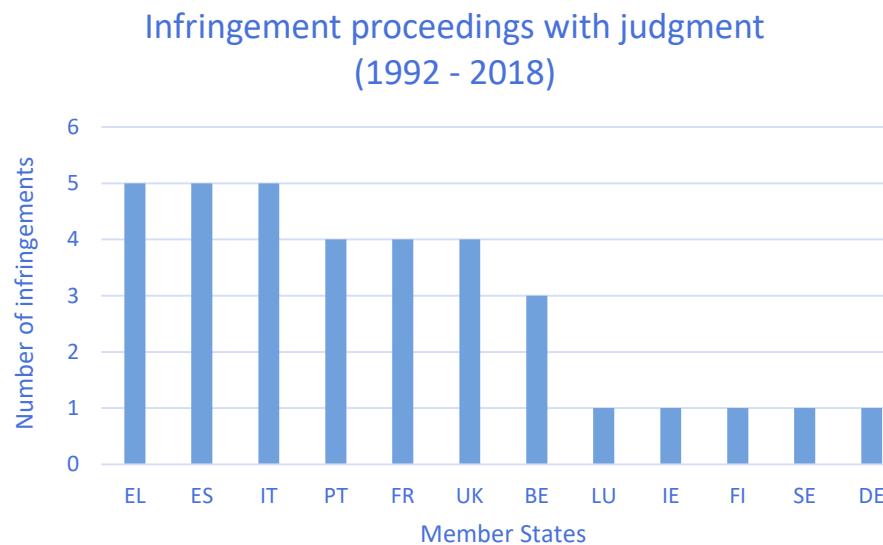


Future investments (Construction and renovation) in EUR/inhabitant/year (2022 - 2027)



## **DIRECTIVE 91/271/EC - EU**

## Obstacles for implementation



- Overambitious targets
- Lack of institutional, administrative, and technical capacity
- Inability to effectively use funds at the local or regional level and implement large-scale projects
- Problems with public procurement
- Inaccurate population forecasts (e.g., urbanization, demographic changes)
- Lack of political will to prioritize the implementation of the UWWT and to channel the necessary resources for implementation
- Institutional reforms
- Public resistance

Source : EC (2019). Evaluation of the Council Directive 91/271/EEC of 21 March 1991, concerning urban waste-water treatment. SWD/2019/0700

### *Implementing partners*

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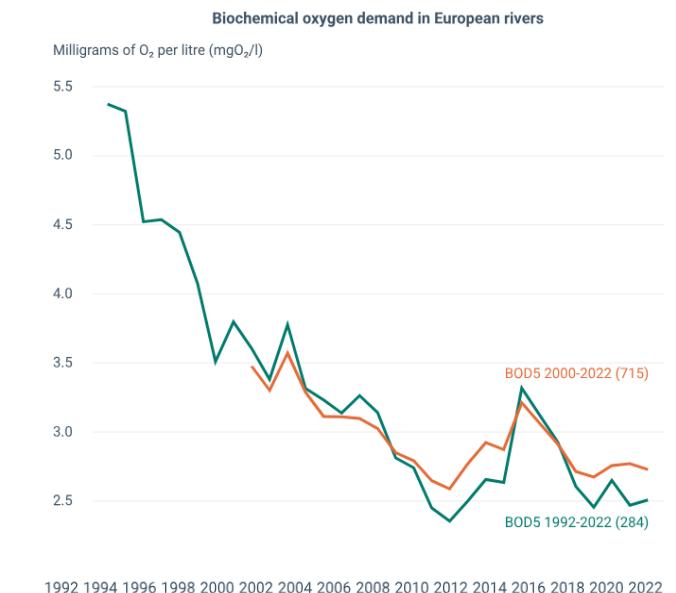
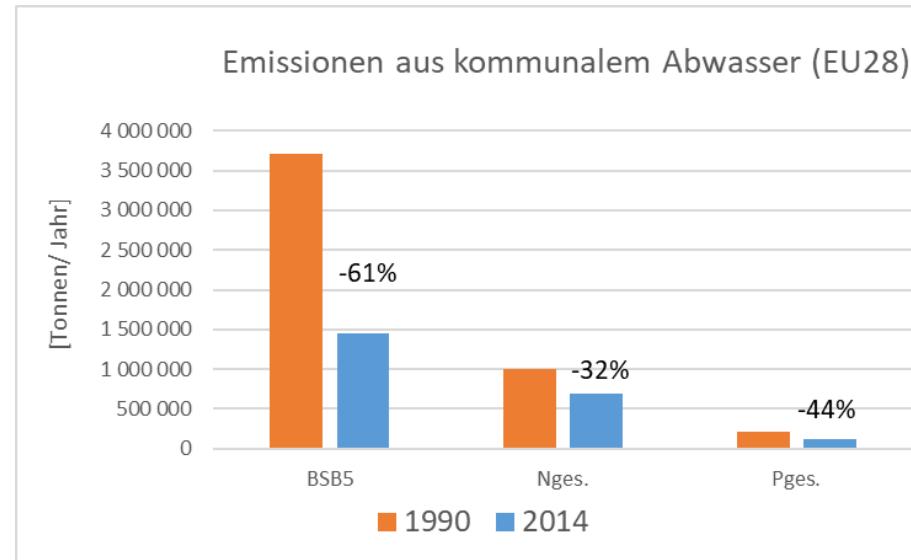
## Benefits

### Evaluation of Directive in the EU Water Fitness Check

- Effectiveness
- Efficiency
- Coherence
- Relevance
- EU-added value

## Effectiveness

- Highly **effective** due to clear and **simple guidelines**
- **Reduction of emissions** from urban wastewater
- Improvement of water quality



Source: EEA (2024): [Oxygen-consuming substances in European rivers](#)

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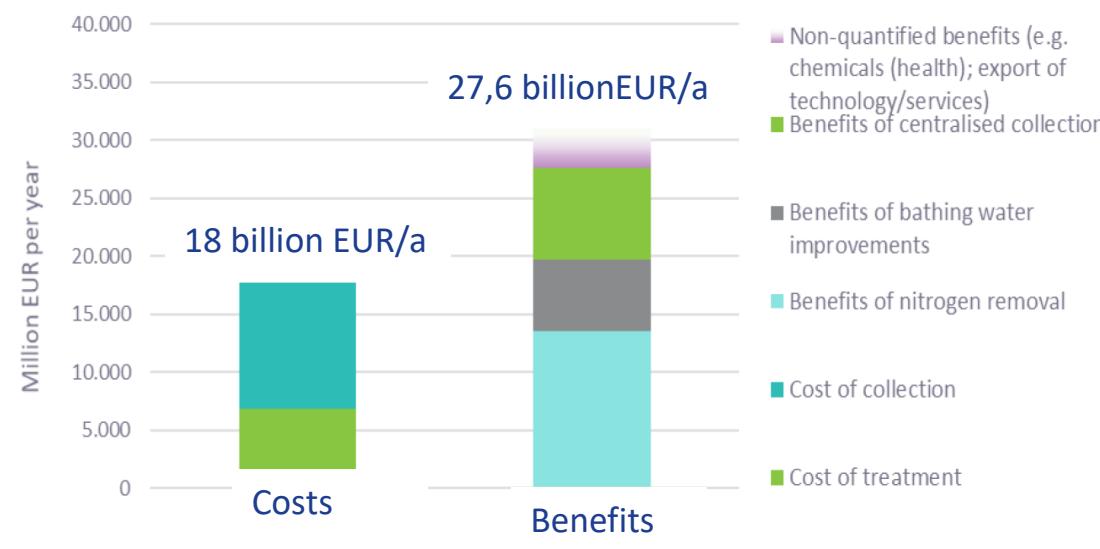
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## DIRECTIVE 91/271/EC - EU

### Efficiency

- **Highly efficient**, even with conservative estimates the benefits exceed the costs



Source: EC (2019). Evaluation of the Council Directive 91/271/EEC of 21 May 1991, concerning urban waste-water treatment. SWD/2019/0700

### Coherence

- Coherent with other EU water directives
- **Contributes** to achieving the objectives of the **Water Framework Directive**, the **Bathing Water Directive**, and the **Drinking Water Directive**
- **Improved coherence with energy and climate policy** possible

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# DIRECTIVE 91/271/EEC - EU

## Relevance

- Directive **still relevant**, but
- Continuous action is required:**
  - Wastewater that is not treated (properly) is still a reason for water bodies failing to achieve good status under the WFD.
  - Failure to implement Directive 91/271/EEC, small urban areas, combined sewer overflows, IAS.
  - Micropollutants, antimicrobial resistance, microplastics.

Surface water bodies: Significant pressures

3rd River Basin Management Plans - Alle

Pressure type group	Countries	Number	Length	Area
P2-7 - Diffuse - Atmospher..	15	57%	46%	39%
P4 - Hydromorphology	21	56%	67%	29%
P2 - Diffuse sources	21	39%	59%	54%
<b>P1 - Point sources</b>	<b>21</b>	<b>21%</b>	<b>40%</b>	<b>37%</b>
P8 - Anthropogenic press..	19	14%	12%	28%
P3 - Abstraction	18	8%	17%	1%
P5 - Introduced species an..	11	3%	5%	3%
P9 - Anthropogenic press..	15	2%	3%	4%
P7 - Anthropogenic press..	14	2%	2%	18%
P6 - Groundwater recharge..	1	0%	0%	7%

## EU-added value

- Directive complies with the principle of subsidiarity
- 60% of rivers in the EU cross national borders
- Uniform standards** in the EU are only possible with **uniform legal requirements**
- Directive enabled the promotion of wastewater infrastructure development through EU funds
- Strong water legislation enabled the establishment of a **strong water sector**. Eight of the world's 15 largest water companies are based in the EU.



## DIRECTIVE 91/271/EC - FRANCE

- France is a large and centralised country combining **rural area, medium size and large cities**
- governmental responsibilities are only exerted by the state and its delegations:
  - the state
  - the state department delegations (96+5);
- National state: defines national legislation, reporting to EU
- State department delegations: water authority including permit/water police for all UWWTPs >20 DT
- Municipalities (36,000 municipalities) have no legislative powers,
  - BUT are responsible of water and wastewater services
  - have organised public wastewater services 11,595 (collective) + 2,362 (individual)



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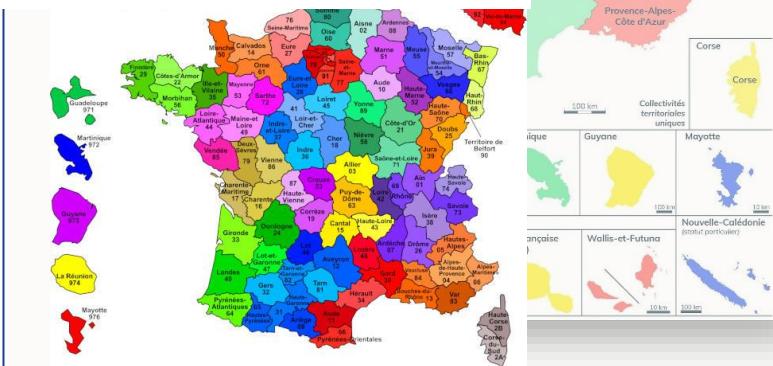
## DIRECTIVE 91/271/EC - FRANCE

### Administrative organisation

#### 13 Region (NUTS 2)



#### 96+5 Département (NUTS 3)



#### 36,000 Municipalities

intercommunal  
organisations

- 11,595 UWU
- 2,362 IAS



Overlaps!!



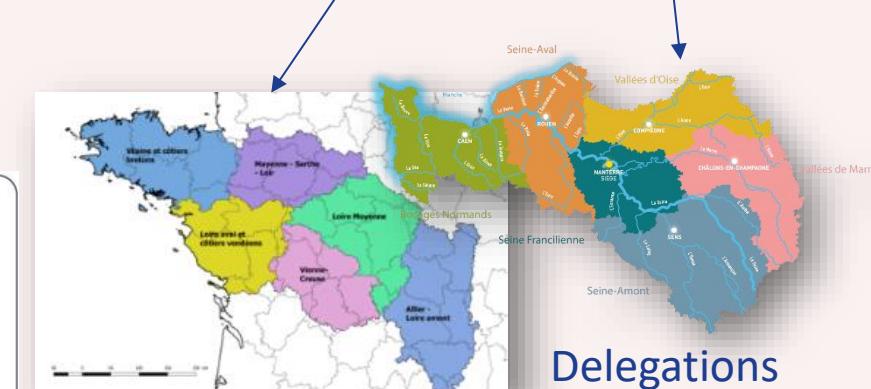
Production : International Office for Water - ©OIEau, 2017 0 100 km



### Water organisation



12 basins  
6 Water agencies  
+ 5 water offices



Delegations



## DIRECTIVE 91/271/EC – FRANCE – HISTORICAL VIEW

1950-1970: progress on treatment, focus on organic pollution and industry

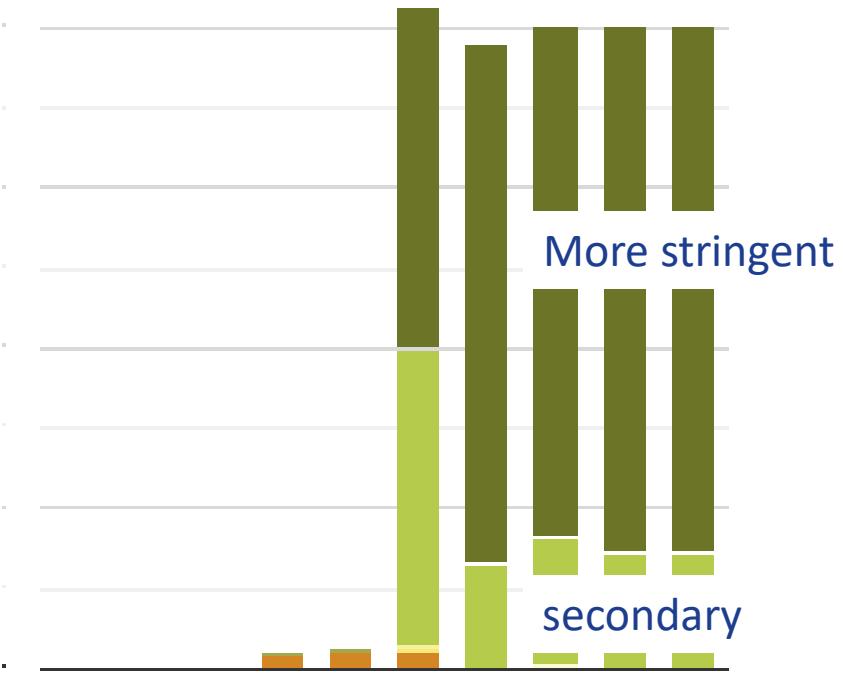
1970-1990: rapid increase of nb of UWWT, cities

1990-2005: focus on UWWD plants and development of smaller collective plants

2005-2020: rural areas and more stringent



Year	Nb of UWWT
1950	50
1960	350
1970	1500
1980	6700
1990	9500
2000	12500



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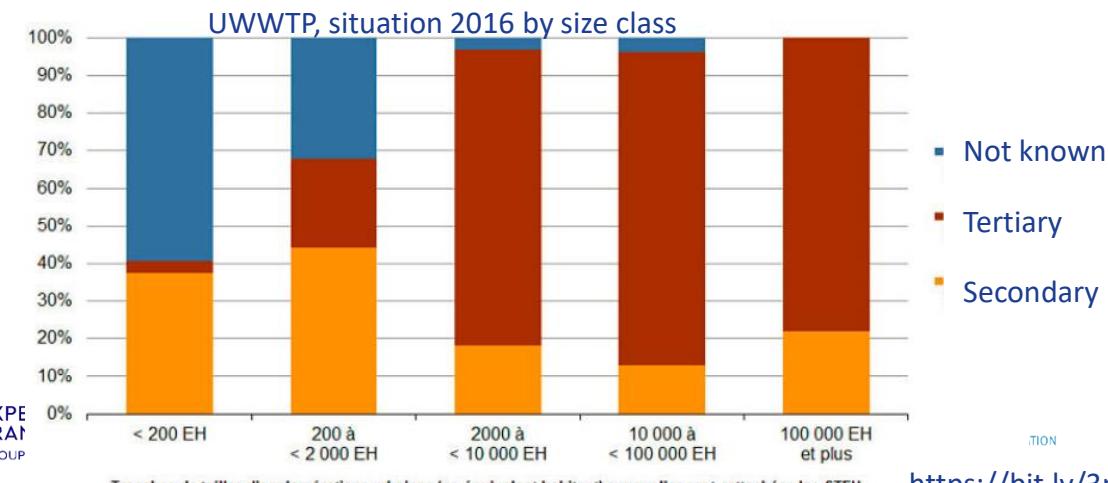
## DIRECTIVE 91/271/EC – FRANCE CURRENT KEY FIGURES

Summary situation in 2021:

- 22,613 Treatment plants: capacity 105,500,000 PE (est. value 26-29 billion EUR)
- 78,5 Mio PE and 2,3 bn m<sup>3</sup> wastewater treated
- 425,000 km of sewer network (est. value 95-131 billion EUR)
- 22,5 million connection to households (est. value 19-26 billion EUR)

Three main sub parts:

- 3,334 treatment plants covered by UWWTD treating **74,0 Mio PE** (47 Mio inh. + economic activities)
- 18,800 treatment plants covered by national authorities treating **9 Mio PE** (7 Mio inh. + eco act)
- 5,8 Mio IAS covered by municipal or inter commune services treating **13 Mio inhabitants**



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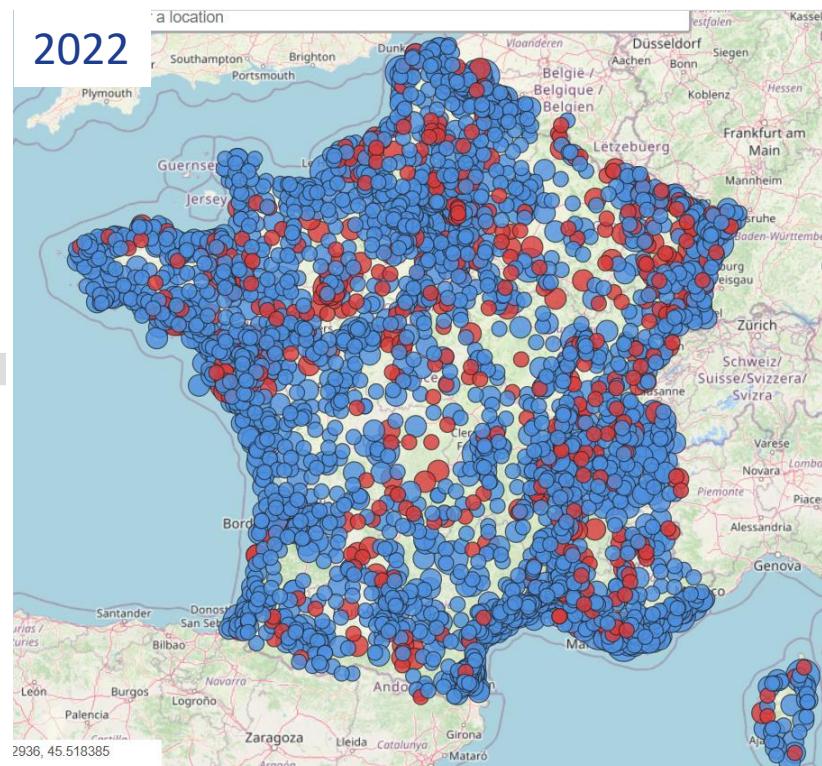
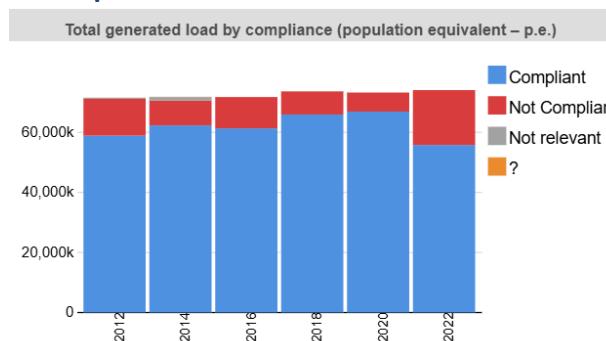
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FRAT  
GROUP

## DIRECTIVE 91/271/EC – FRANCE CURRENT COMPLIANCE SITUATION (2022)

- 67% of the territory is sensitive area (tertiary treatment)
- State services control but management by local authorities
- Difficulties to reach full compliance

### Temporal trend



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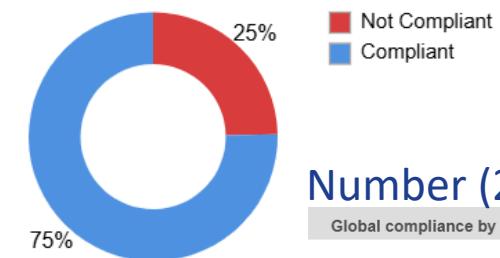
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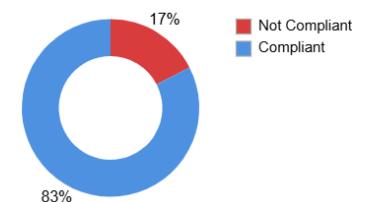
### Load (2022)

Global compliance by Generated load (p.e.)



### Number (2022)

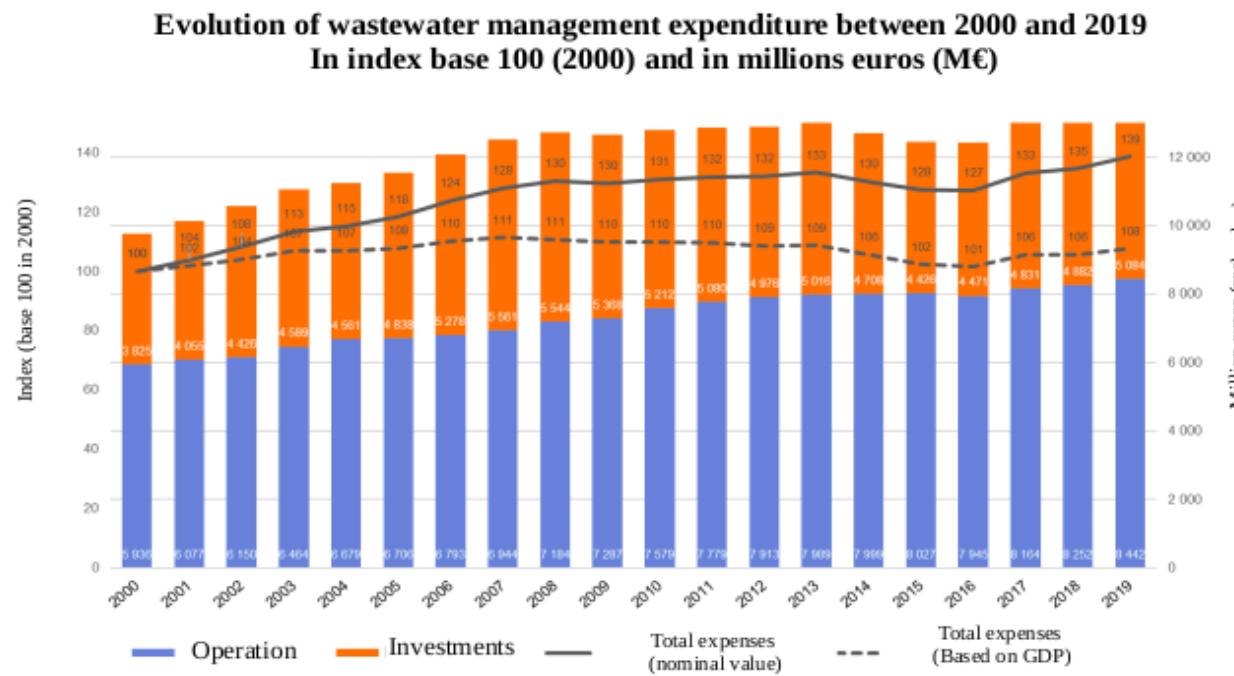
Global compliance by number of agglomeration (>2000 pe)



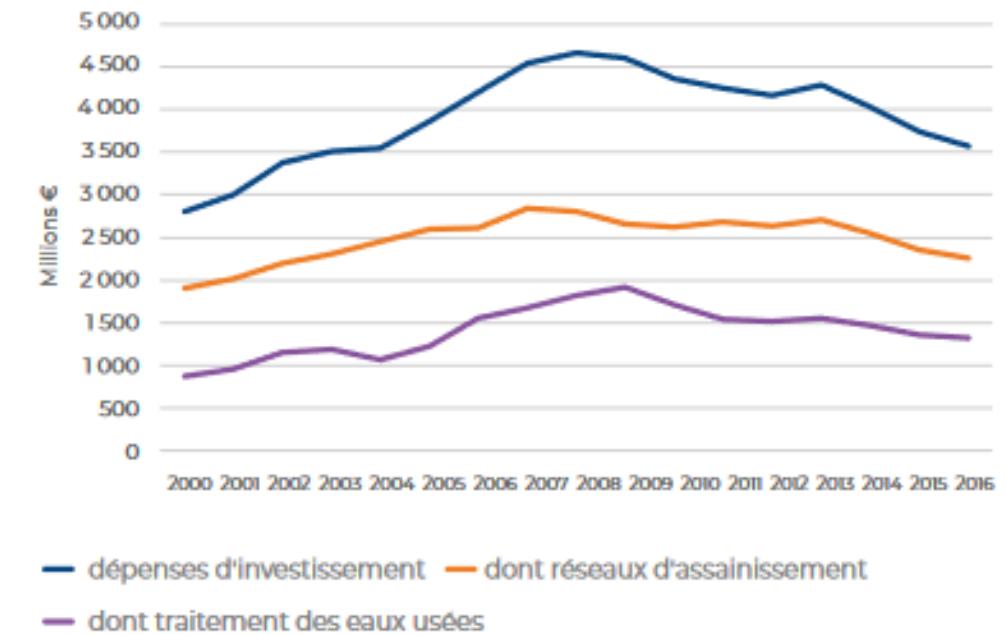
## DIRECTIVE 91/271/EC – FRANCE: COMBINE INVESTMENT & OPERATION COSTS

- Current value **236bn.€**, annual expenditures 2000-2019 from **10 to 13bn.€**
- Continuous **increase** of operation expenditures (of which energy),
- Recent **slowdown in investments** for both sewer and plants

### Wastewater expenditures



### Wastewater investments





## DIRECTIVE 91/271/EC – FRANCE LESSONS LEARNT

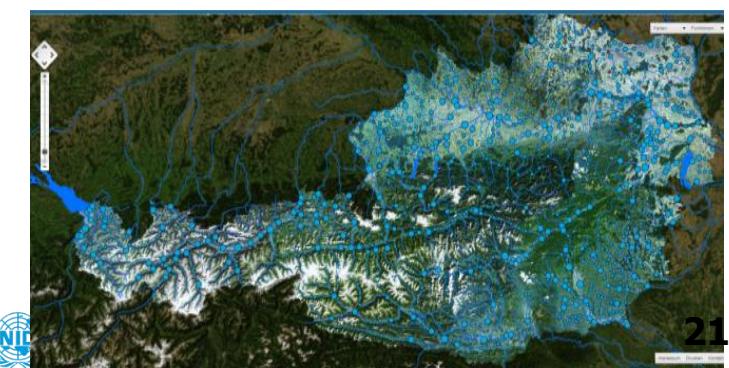
- France applies **subsidiarity principle** to address the entire urban wastewater problem (urban/rural) beyond Directive 91/271/EEC: from single household to small settlements to large cities
- With climate change, **combined sewers** generate problems: separation of rain necessary (urban planning)
- The national law requires mandatory connection once sewer is in the street: **an asset!**
- To ease management, France chose to have **one agglomeration = 1-n treatment plants**
- France uses a **national common water language** and a **single national database** for wastewater data
- Wastewater is for citizen hidden: **education** is needed
- At agglomeration level it is difficult to **maintain** compliance over time (aging, staff education...)
- Wastewater requires **regular investment**: big challenge to maintain this with a changing biophysical and political environment

Implementing partners:



## DIRECTIVE 91/271/EC - AUSTRIA

- Austria is a **federal state**, governmental responsibilities are allocated to four levels of territorial authority:
  - the federal state;
  - the nine provinces;
  - around 100 district authorities
  - the local authorities (around 2,100 municipalities).
- For water protection legislation the **federal state** acts as **legislator**, while the **provinces** are responsible for **administering** environmental law (indirect federal administration)
- Municipalities have no legislative power, but **wastewater services** are a clear **municipal task**
- Austrian Water and Waste Management Association (ÖWAV)



Implementing partners:

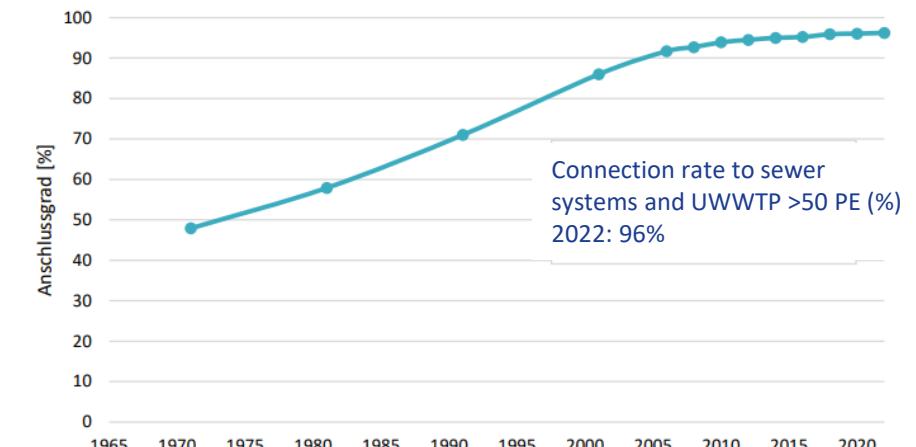


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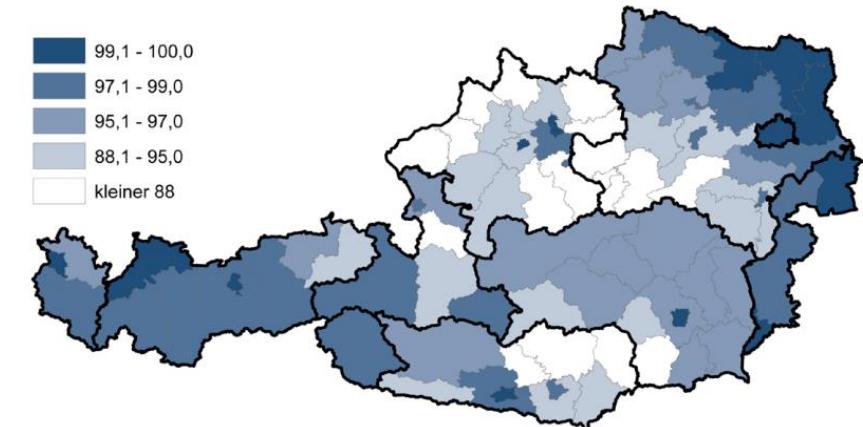
- UWWTD is implemented in
  - General wastewater emission ordinance
  - 1<sup>st</sup> wastewater emission ordinance for UWWTP >50 PE
  - Nine province Building Laws and/or Sewer Connection Acts → Connection to sewer systems and UWWTPs > 50 PE is mandatory
- Topological reasons for choice of system:
  - Lowlands: central collection without pumping → UWWTPs
  - Hilly regions: collection requires pumping → small WWTP
  - Alpine valleys: central collection at the bottom → UWWTPs

Size class (PE)	Number of WWTP	% number	Organic design capacity (PE)	% organic design capacity
≤ 50	27 452	93,6%	260 500	1,2%
51 – 1,999	1 236	4,2%	455 862	2,0%
≥ 2,000	633	2,2%	21 579 063	97%
Total	29 321	100%	22 295 425	100%

Implementing partners:



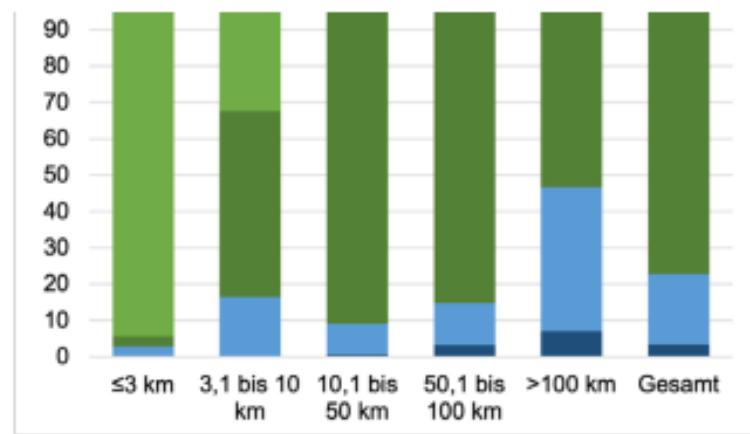
Connection rate to sewer systems and UWWTP >50 PE (%) on district level (2023)



## DIRECTIVE 91/271/EC - AUSTRIA

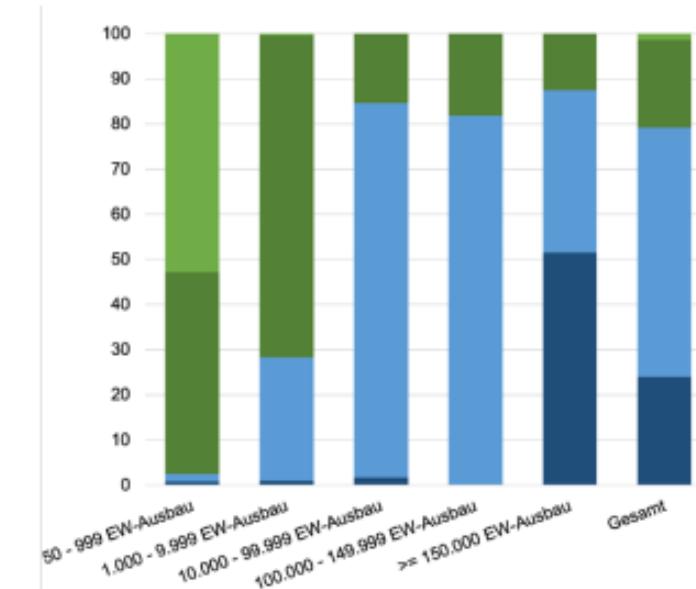
- Wastewater treatment in AT is a clear municipal task, private companies are an exemption

Sewer systems according to their length (%)



- Cooperatives or natural persons
- Municipalities
- Associations
- Municipal enterprises

UWWTPs according to their size (%)



- (Waste) water cooperatives (§73ff of the AT Water Act): local interested parties, natural persons
- (Waste) water associations (§87ff of the AT Water Act): several municipalities, public law entities
- Municipal enterprises: legally independent companies that can be established by municipalities

Implementing partners:

umweltbundesamt<sup>①</sup>  
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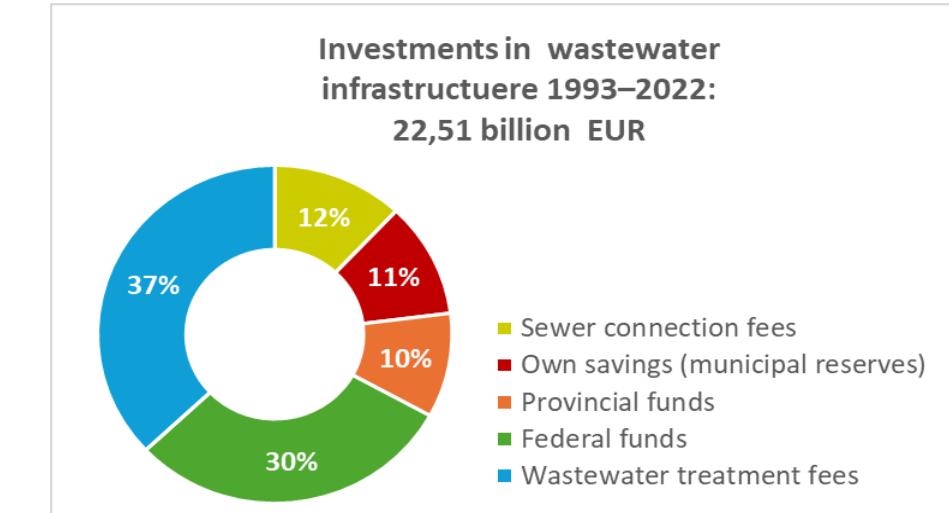
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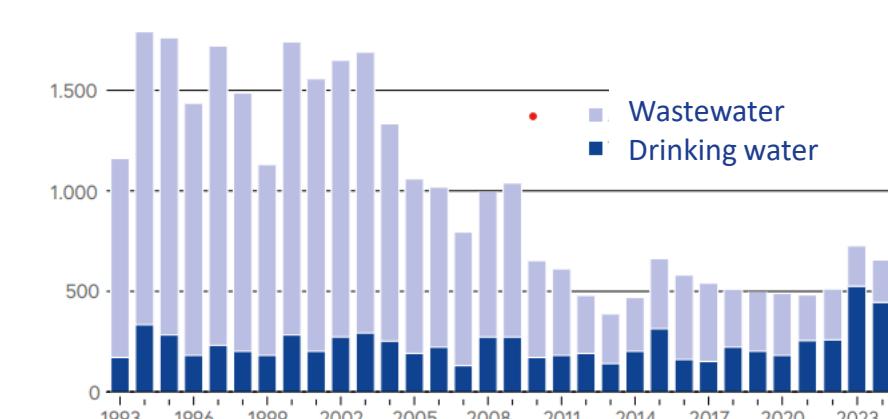
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## DIRECTIVE 91/271/EC - AUSTRIA

- From **1959** to **2022** around **52 billion Euro** were invested in the AT wastewater infrastructure (since 1993 30% coming from federal funds).
- Funds** are only granted in case of **minimum wastewater fees**
- 2023** to **2029**: Investments of around **2,8 billion EUR** required (80 % sewer systems, 20 % UWWTs, without new investments according to Directive 2024/3019)
- Sewer systems**: Focus on **renovation** and preservation
- Goal: **Increase the renovation rate** from the current 0.3% per year to 1% to 2% per year



Subsidized Investments 1993–2024 (Source: BML/KPC, 2025)  
All figures in million €



Source: [BML \(2024\). Lagebericht Kommunales Abwasser](#), [ÖWAV \(2024\). Branchenbild der österreichischen Abwasserwirtschaft 2024](#), [Umweltinvestitionen des Bundes, 2024](#)

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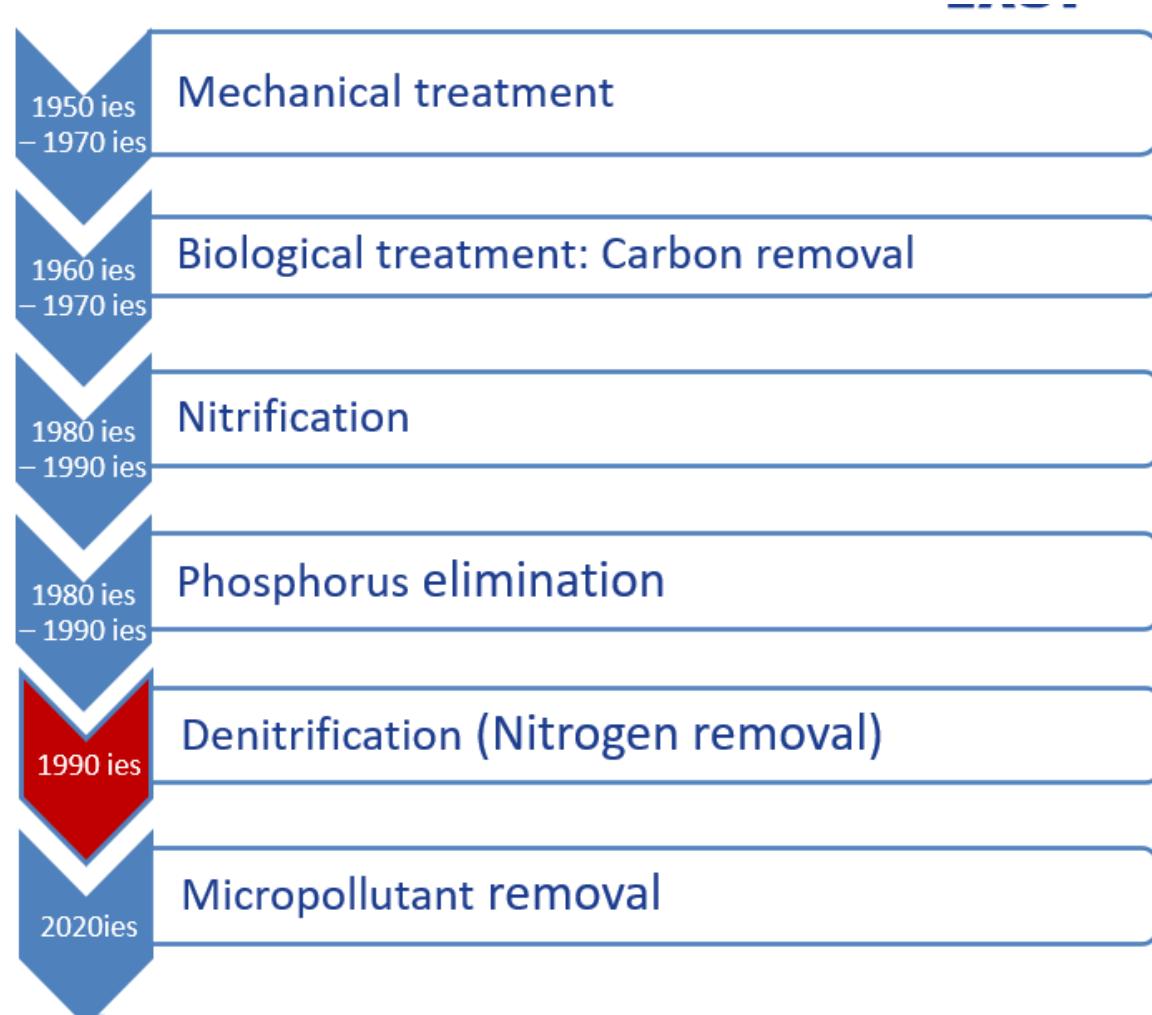
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## DIRECTIVE 91/271/EC - AUSTRIA

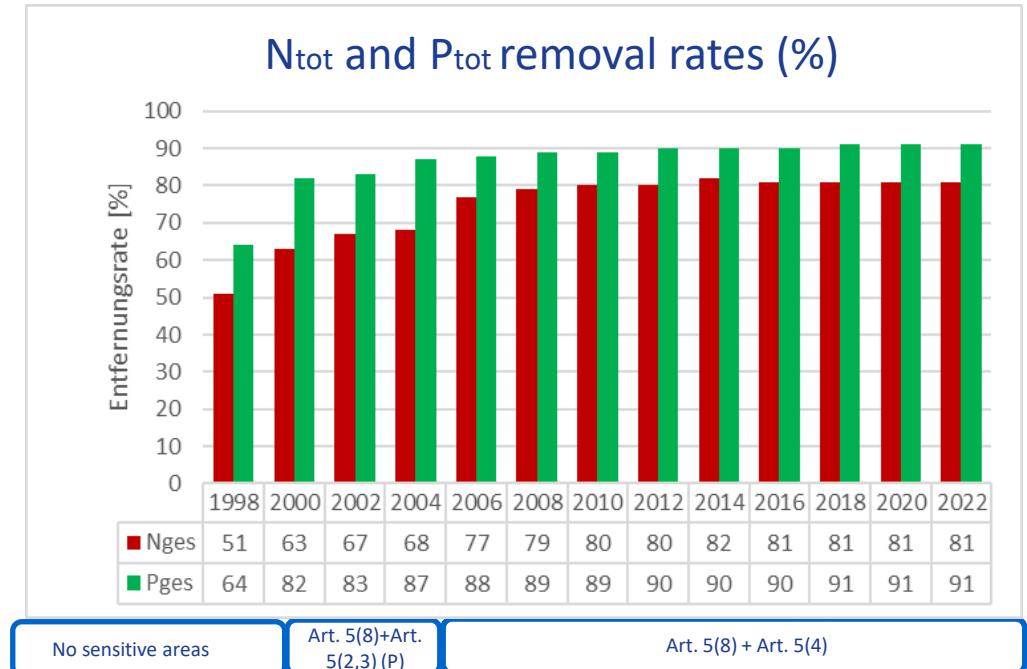
- 1950ies: Eutrophication of surface waters → visible pollution → start of building UWWTP
- Strict requirements for wastewater treatment (nutrient removal) even before EU accession (1995)
- UWWTD is implemented in AT by two federal laws (general wastewater emission ordinance and waste water emission ordinance for UWWTP > 50 PE) and nine provincial sewer connection laws
- Ordinance for data collection for reporting under UWWTD (emission register surface water bodies)



Implementing partners:

## DIRECTIVE 91/271/EC - AUSTRIA

- Since 2002: Application of UWWTD Art. 5(8) + 5(2,3) for  $P_{tot}$
- In 2007, RO declared the Black Sea coastal area a sensitive area ( $N_{tot} + P_{tot}$ ). AT 96% in the Danube river basin
- Since 2006: Application of Art. 5(8) + 5(4) to gain time for implementation
- Area-wide approach offers more flexibility than Art. 5(2, 3)
- AT complies with the UWWTD since 2002



Implementing partners:

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## DIRECTIVE 91/271/EC – AUSTRIA LESSONS LEARNT

- **Agglomerations** are the **central element of UWWTD**. Definition of agglomerations requires a methodological guidance (e.g. for RO: [World Bank \(2020\)](#))  
In AT **wastewater treatment** already very advanced when AT entered EU, therefore AT chose approach: 1 agglomeration  $\geq$  2,000 PE = sewer catchment of UWWTP  $\geq$  2,000 PE
- Implementing wastewater treatment needs **time** and **money** (see AT: **30 - 40 years**)
- Challenge after full construction is **service** and **maintenance**
- **Sound data collection** and **databases** on UWWTP are an essential for decision making: Data flows and responsibilities need to be **defined in ordinances**. In addition, benchmarks are helpful.
- Water **permits** and allocation of **funds could be connected to conditions**, e.g.
  - Water permits foresee an obligation to report operational data
  - Funds only granted in case of minimum wastewater tariffs and obligation to report data regularly
- **Wastewater associations** are essential for education of UWWTP staff and knowledge/ information exchange. They help to raise **awareness for importance of wastewater treatment**

*Implementing partners:*



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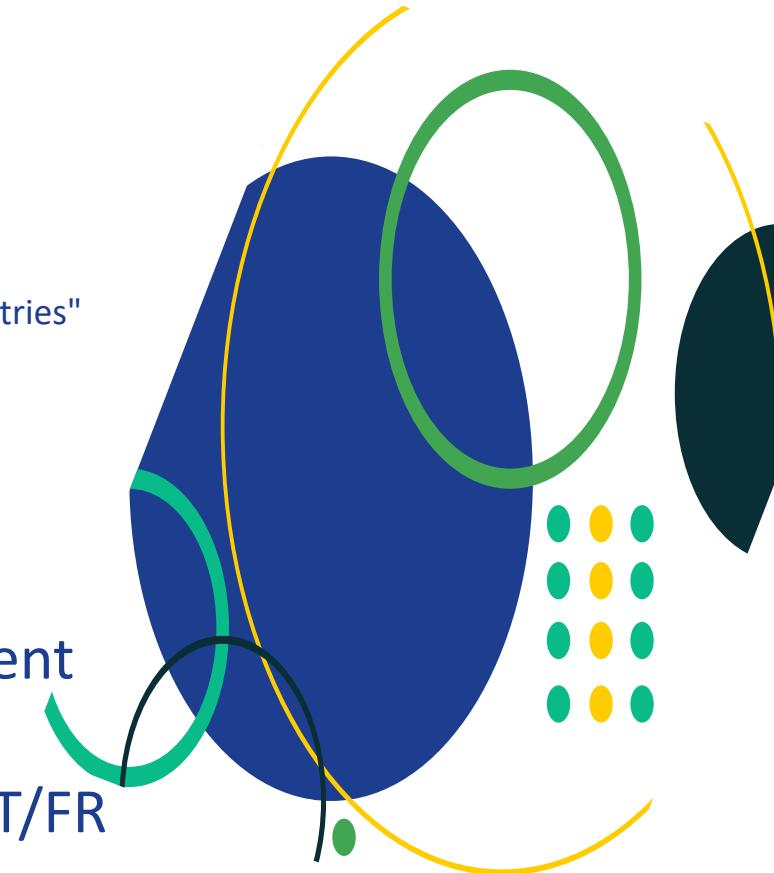
# EU 4 GREEN RECOVERY EAST

Official title: "Recovery through a Circular Economy and Pollution Reduction in the Eastern Partnership countries"

**Webinar: implementation of the old and new UWWT**

- Directive 2024/3019/EC the new Urban Wastewater Treatment and challenges for implementation

in Europe/AT/FR



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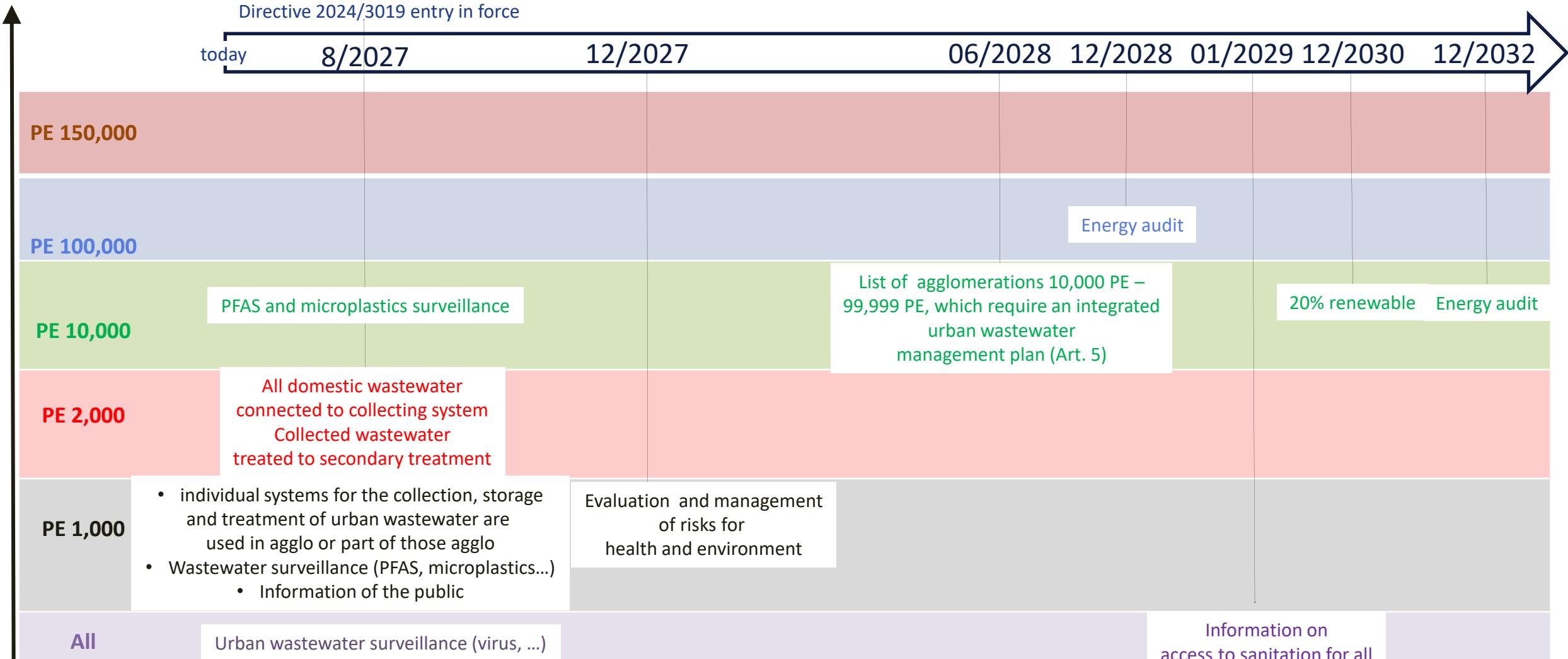
## DIRECTIVE 2024/3019 - EU

- Replaces the UWWT (91/271) from **1/08/2027**
- **35 articles**, 59p (vs 91/271 - 20 articles, 13p)
- **Enhanced ambition**, e.g.
  - A **key tool** in the EU action plan to “**zero pollution**”
  - Agglomerations  $\geq 1,000$  PE
  - Integrated urban wastewater **management plans** (Art. 5)
  - **Nutrient removal**: stricter performance, all large plants (50% of load at EU level) (Art. 7)
  - **Quaternary** treatment, microplastics & micropollutants (Art. 8)
  - Extended Producer Responsibility – **EPR** (Art. 9 and Art. 10)
  - **Energy neutrality** (Art. 11), Green House Gases emission and reduction (Art. 21)
  - **Health** and early warning systems and Antimicrobial resistance (Art. 17)
  - **Human right**: Access to sanitation (Art. 19)
- A need to **shift** from reporting to **public access to information**
- **3 EU working groups** to work on 18 implementing acts and 5 delegated acts

Implementing partners:



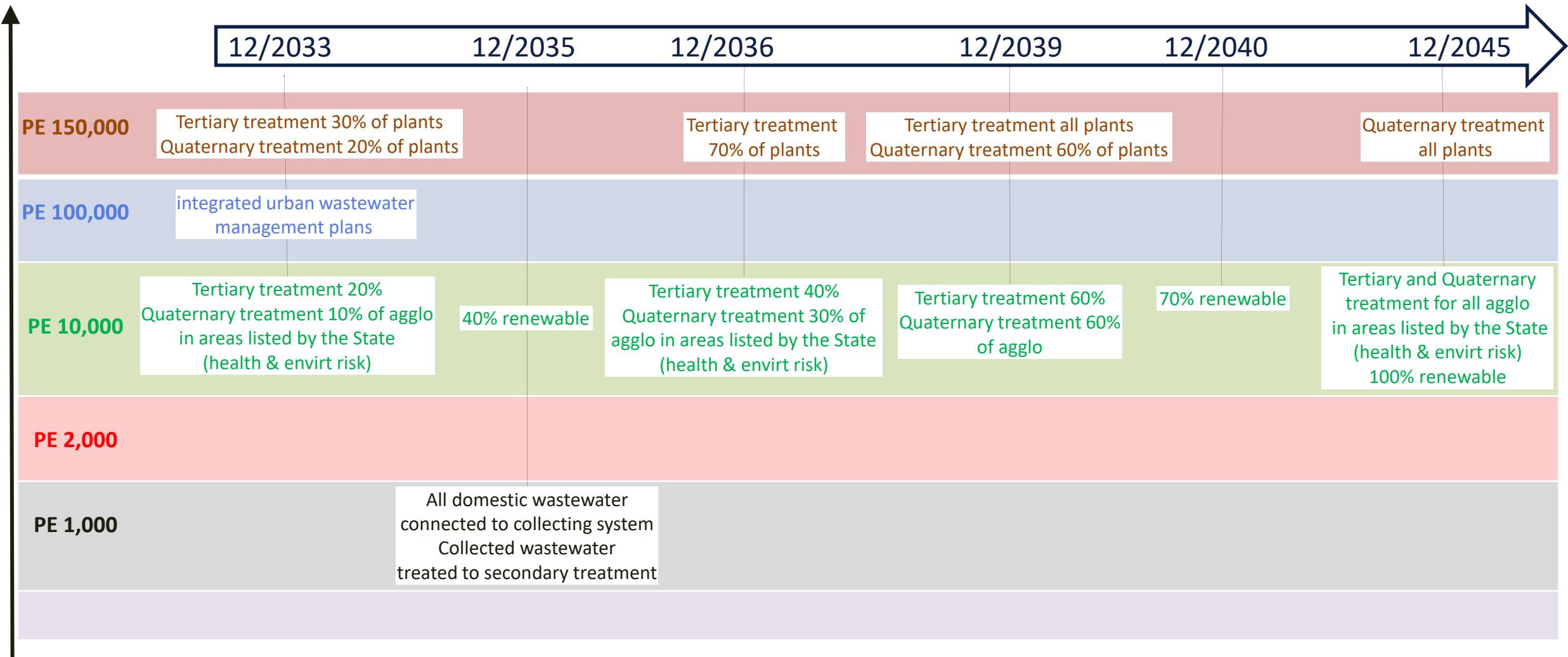
## DIRECTIVE 2024/3019 - NEW OBLIGATIONS AND THEIR TIME PLAN (1/2)



Implementing partners:



## DIRECTIVE 2024/3019 - NEW OBLIGATIONS AND THEIR TIME PLAN (2/2)



Implementing partners:



## DIRECTIVE 2024/3019 - NEW OBLIGATIONS IN DETAILS

- Collecting systems (Art. 3)
  - **equipment and collection of domestic wastewater** for all agglomerations >1,000 PE
  - Application: > 2,000 PE - applicable now, > 1,000 PE - **31/12/2035**
- Individual systems (Art 4) derogation to Art.3
  - **Individual systems** for collection, storage and/or treatment
  - *Justification* for use if for > 2,000 PE individual systems load **>2%** of national load
  - Application: > 1,000 PE - **1/8/2027**
- Integrated urban wastewater management plans (Art. 5)
  - All 100,000 PE and more – Application 31/12/2033
  - Part of 10,000 to 100,000 PE – 4 conditions based on pollution by storm water overflow - Application 22/06/2028

Implementing partners:





## DIRECTIVE 2024/3019 - NEW OBLIGATIONS IN DETAILS

- Secondary treatment (Art. 6)
  - Collected wastewater undergo **secondary treatment**
  - Application: > 2,000 PE - applicable now, > 1,000 PE - **31/12/2035**
- Tertiary treatment (Art. 7)
  - Collected wastewater undergo **tertiary treatment**
  - **Eutrophication sensitive areas (SA) for N and/or P** designated – 31/12/2027 – enhanced performance
  - Application: **all > 150,000 PE** – 30% of plants 31/12/2033, 70% 31/12/2036, all 31/12/2039
  - **10,000 – 150,000 PE discharging in SA** - 20% of plants 31/12/2033, 40% 31/12/2036, 60% 31/12/2039, all 31/12/2045
- Quaternary treatment (Art 8)
  - Collected wastewater undergo **quaternary treatment**
  - **Micropollutant environment & health risk areas** designated – 31/12/2030, update every 6 years
  - Application: **all > 150,000 PE** – 20% of plants 31/12/2033, 60% 31/12/2039, all 31/12/2045
  - **10,000 – 150,000 PE discharging in risk areas** 10% of plants 31/12/2033, 30% 31/12/2036, 60% 31/12/2039, all 31/12/2045

Implementing partners:



## DIRECTIVE 2024/3019 - NEW OBLIGATIONS IN DETAILS

- Energy neutrality of urban wastewater treatment plants (Art 11)
  - Energy audit every 4 years
  - Application: all 100,000 PE and more – 31/12/2028, 10,000 – 100,000 PE 31/12/2032
  - Renewable energy
  - Application: all 10,000 PE and more 20% of energy used 31/12/2030, 40% 31/12/2035, 70% 31/12/2040, all 31/12/2045
- Local climatic conditions (Art 13)
  - Design, construction and operation allow sufficient performance under normal climate
  - Application: 1/8/2027
- Water reuse and urban wastewater discharge (Art 15)
  - Encourage treated wastewater reuse with attention to ecological flow and effects on environment & health
- Monitoring of urban wastewater (Art 17)
  - Inlet monitoring of viruses (SARS, Polio, Influenza, other emerging) + 100,000 PE and above: antimicrobial resistance (AR)
  - Application: 1/8/2027 & AR 2 years after implementing act

Implementing partners:



## DIRECTIVE 2024/3019 - NEW OBLIGATIONS IN DETAILS

- Risk assessment and management (Art 18)
  - Identify and assess **risks from wastewater discharge** for freshwater abstraction, bathing, ecological status & aquaculture
  - Application: **31/12/2027**
- Access to sanitation (Art 19)
  - Access for all including vulnerable and marginalized
  - Application: **1/8/2027**
- Surveillance (Art 21)
  - Monitoring of discharges (Annex IB), of sludge, reuse in agriculture, GHG released, energy produced & used for plants >10,000 PE
  - Monitoring of pollutant concentration & loads including microplastics and PFAS and microplastics in sludge for plants >10,000 PE
  - Application: **1/8/2027**
- Public information (Art 24)
  - **up-to-date information** on collection & treatment of urban wastewater **made available** to the public **online**
  - All households **receive** information on compliance, overall volume treated & estimated average volume per household
  - Application: > 1,000 PE - **1/8/2027**

Implementing partners:



## IMPLEMENTATION ACTS & DELEGATED ACTS ON INTEGRATED MANAGEMENT PLANS, EPR, PHOSPHORUS RECOVERY

### Individual Systems Art 4§4

- › Requirements for design, operation, maintenance, and regular inspections

IA, 2 January 2028

### Integrated management plans Art 5§6 (a) and (b)

- › Methods to define measures to be included in integrated wastewater management plans
- › Alternative indicators to verify the indicative objective of 2%

IAs, 2 January 2028

### Extended Producer Responsibility Art 9§5

- › Criteria on exoneration for products not creating micropollutants

IA, 31 December 2027

### Phosphorus recovery Art 20§2

- › Reuse and recycling rate for phosphorus from sludge and treated water

DA, 2 January 2028

Implementing partners:



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## IMPLEMENTATION ACTS & DELEGATED ACTS ON MONITORING, REPORTING, ENERGY & GHG EMISSIONS

### Monitoring

- › Antimicrobial resistance (Art 17§3) – IA, 18 months
- › ‘PFAS Total’ & ‘Sum of PFAS’ (Art 21§3) – IA, 24 months
- › Microplastics in wastewater/sludge (Art 21§3 a) – IA, 30 months
- › Micropollutants (Art 8§6) – IA, no deadline

### Reporting

- › Reporting new parameters (Art 22§4) – IA, 31/12/2028
- › Format for reporting on integrated wastewater plans (Art. 5§6 c) – IA, 36 months
- › Format for risk assessments for designation of risk areas (micropollutants) (Art 8§3) – IA, no deadlines

### Energy & GHG

- › GHG monitoring (Art 21§3 a) – IA, 30 months
- › Calculation on energy neutrality (Art 11§3) – IA, no deadline

Implementing partners:

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# DIRECTIVE 2024/3019 - EU

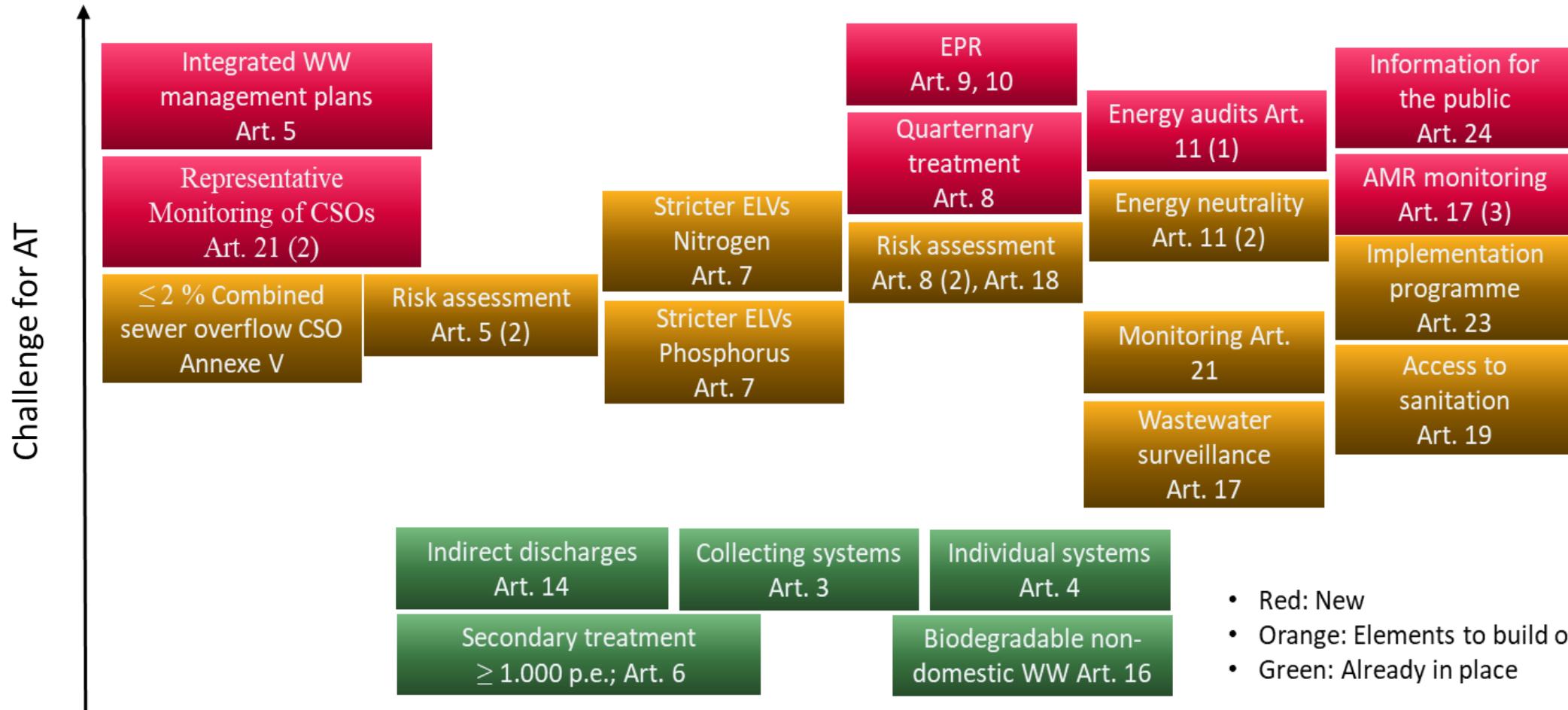
## Challenges

- **18 implementing acts** and **5 delegated acts**, partly due after 08/2027 (transposition deadline), They will define specific requirements of the Directive, *14 to be published before Dec 28*
- **3 ENV/MS sub-groups:**
  - SG1: IAS + rain weather,
  - SG2: energy neutrality , GHG and sludge,
  - SG3: surveillance methods
- **Interpretation** of definitions of UWWTD (e.g. “*agglomeration*”, “*generated load*”, EPR....)
- Inclusion of **several risk assessments** (e.g. Art. 5, Art. 7, Art. 8 and Art. 18) instead of only one risk assessment in Directive 91/271/EC (sensitive areas – nutrient removal)
- **Costs** (e.g. for upgrade of nutrient removal to stricter standards, quaternary treatment)
- Extended Producer Responsibility (**EPR**) for **financing quaternary treatment**
- Complaints by industry and Poland – if successful - could call into question the funding of quaternary treatment

*Implementing partners:*



## DIRECTIVE 2024/3019 - AUSTRIA



Implementing partners:



## DIRECTIVE 2024/3019 - AUSTRIA

### Integrated urban wastewater management plans (Art. 5)

#### Challenges:

- In AT only a **few agglomerations** have integrated **ww management plans** so far.
- **Representative monitoring** of CSOs represents a challenge
- AT has a **national standard** for CSO. This standard is a Code of practice, but not legally binding → **not generally implemented**
- **Risk assessment** to determine, which middle-size agglomerations require a plan, **needs a lot of data**. Not all data is yet available. Challenge, as risk assessment has to be completed in June 2028



Implementing partners:



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## DIRECTIVE 2024/3019 - AUSTRIA

### Nutrient removal (Art. 7)

#### Challenges:

- AT has **tertiary treatment** (mostly N+P) for **all UWWTP  $\geq 2,000$  PE**
- Compliant with new requirements in 2022: **P<sub>tot</sub>: 261** out of 283, **N<sub>tot</sub>: 226** out of 283

Parameter	Size class	Requirement concentration		Requirement minimum removal rate	UWWTP/ Agglomerations, which do not yet fulfill new requirements (EMREG-OW, reference year 2022)
P <sub>tot</sub>	10,000 – 149,999 PE	0,7 mg/l	OR	87,5 %	15 out of 261 = 6 %
	150,000 PE or more	0,5 mg/l	OR	90 %	7 out of 22 = 32 %
N <sub>tot</sub>	10,000 – 149,999 PE	10 mg/l	OR	80 %	50 out of 261 = 19 %
	150,000 PE or more	8 mg/l	OR	80 %	7 out of 22 = 32 %

- Need for up-grade of UWWTP → costs

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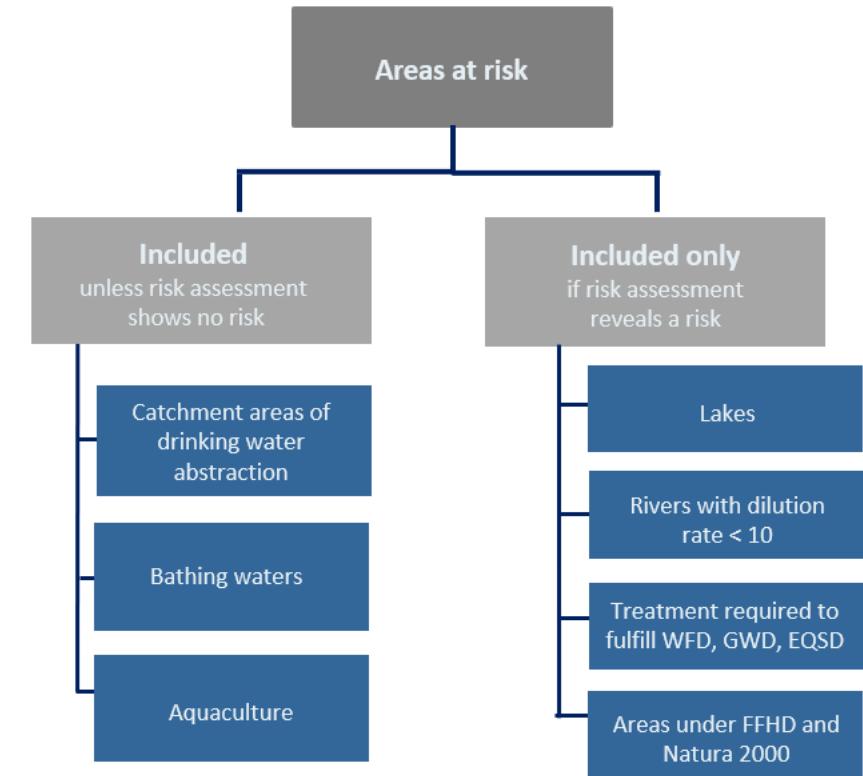


## DIRECTIVE 2024/3019 - AUSTRIA

### Quaternary treatment (Art. 8)

#### Challenges:

- AT has **not yet** any UWWTP with **quaternary treatment**
- **22 UWWTP  $\geq 150,000$  PE** need to be **upgraded**
- 261 middle-size UWWTP: decision, which need to be upgraded depends on risk assessment → implementing act pending
- As long as methodology for risk assessment is not clear → number of **UWWTP 10,000 PE – 149,999 PE** to be upgraded very **variable**
- **Financing depends** on number of UWWTP to be upgraded
- **EPR:** many open questions, e.g.
  - Hazardousness of substances
  - „*Readily biodegradable*“,
  - ....

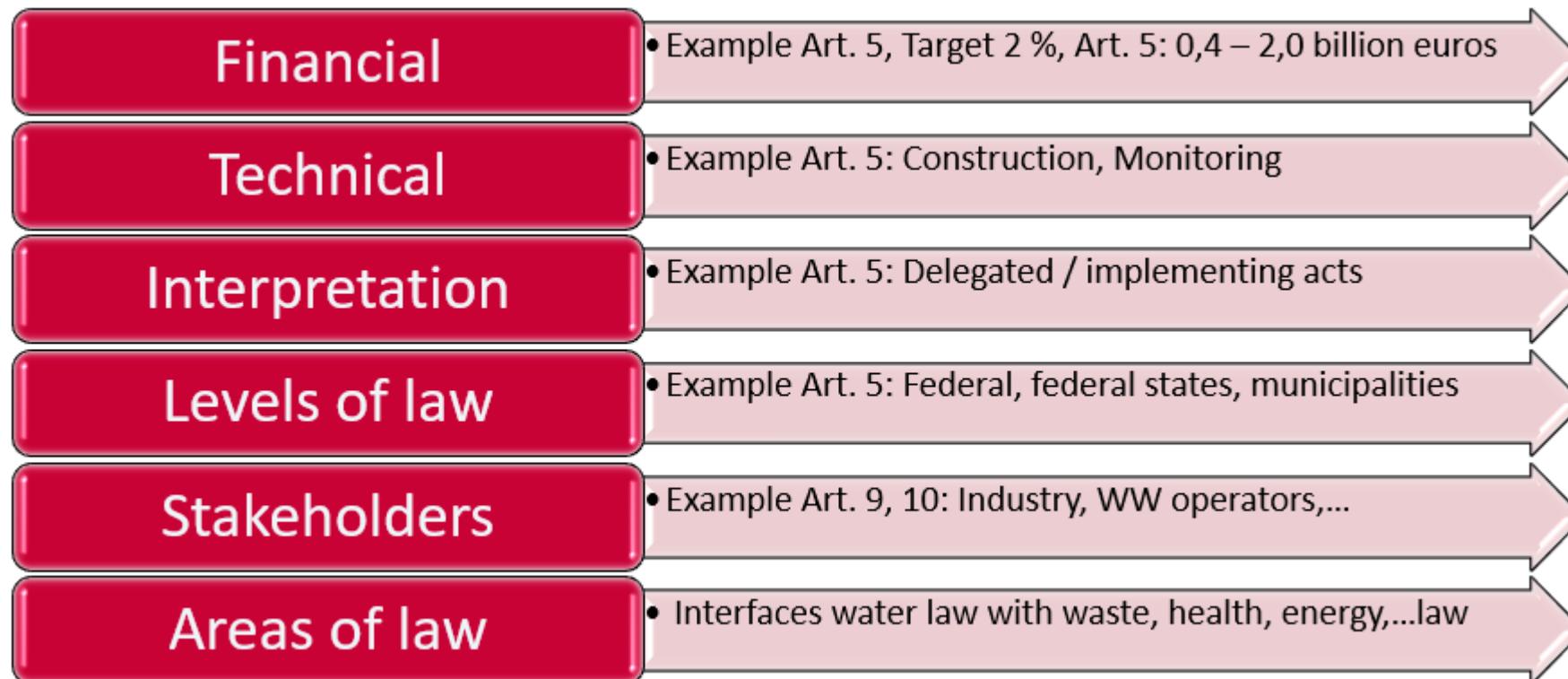


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## DIRECTIVE 2024/3019 - AUSTRIA

### Challenges:



Implementing partners:



# DIRECTIVE 2024/3019 - AUSTRIA

## Implementation into national law in AT – Work packages

WP 1 Integrated urban WW management plans	WP 2 Requirements for WW treatment	WP 3 Extended producer responsibility	WP 4 UWWTP: Climate, Energy, Health, Circular Economy	WP 5 Implementation and Reporting
Collecting systems Art. 3	Individual Systems – level of protection; Art. 4 (2)	Extended producer responsibility, Art. 9	Energy neutrality Art. 11	Information on monitoring of implementation; Art. 22
Individual systems (register and inspections) Art. 4	Secondary treatment Art. 6	Producer responsibility organisations, Art. 10	Local climatic conditions Art. 13	National implementation programme; Art. 23
Integrated urban WW management plans; Art. 5	Tertiary treatment Art. 7	<b>WP 6 Organizational, Enforcement; Compensation</b>		
Information for the public Art. 24	Quaternary treatment Art. 8	Transboundary cooperation; Art. 12	Water reuse Art. 15 (1)	
	Indirect discharges Art. 14	Access to justice; Art. 25	Urban ww surveillance Art. 17	
	General requirements Art. 15 (2, 3, 4)	Compensation; Art. 26	Access to sanitation Art. 19	
	Direct discharge of biodegradable non-domestic WW; Art. 16	Penalties; Art. 29	Sludge and resource recovery; Art. 20	
	Risk Assessment Art. 18			

12

Implementing partners:



## DIRECTIVE 2024/3019 – FRANCE: A LEGAL CHALLENGE

- The 18 implementing acts and 5 delegated acts will **fix technical aspects** of implementation  
→ France will participate **to all 3 EU** technical sub-groups
- **French Water legal framework** is embedded in an **Environment code** linked to **several other codes** (urbanism code, health code, commercial code, customs code, rural and marine fishing code, mines code, civil code...)
- France Wastewater management uses **subsidiarity** with legal texts to address also domestic wastewater outside UWWD agglomerations: agglomerations <1,000 PE, individual households  
→ Transposition is a **complex exercise** to be finished **within 2 years**
- The envisaged legislative vector: a **transposition order** via an enabling act.

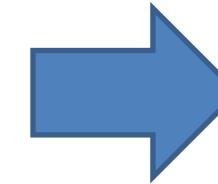
Implementing partners:





## DIRECTIVE 2024/3019 – FRANCE: A DEDICATED ORGANISATION

- Inter-ministerial steering committee
- Inter-ministerial technical committee
- National working groups



Prepare the texts  
for consultation

### National working groups

### 9 Thematic working groups

### 2 Transversal working groups

Working group with  
authorities and stakeholders

Treatment (secondary, tertiary, quaternary, sludge reuse)

Rain water

Prospective surveillance and delineation of sensitive areas

EPR

Energy neutrality

Management of non domestic wastewaters

Independent and appropriate systems

Access to sanitation

Epidemiologic surveillance

Financing

Information systems and IT tools

AMORCE	ANSATESE	ASCOMADE
AMF	ASTEE	ATANC
CLCV	Eurofins	EPNAC
FEBEA	FNCCR	France Urbaine
FP2E	GEMME	LEEM
Nères	Oleau	SYPREA
SIAAP	SYNTEC	Syntea
UIE		

DGOM	DGCL	
DGPE	DGS	
DGE		
DREAL	DDT/DEAL	
AE	OE	
INRAE	OFB	



## DIRECTIVE 2024/3019 – FRANCE – TERTIARY TREATMENT – GENERAL CASE

- Situation
  - Case 1: plants with a load  $\geq 150,000$  PE: 63 plants in total. Implementing steps 30/70/100%, ie 19/44/63 plants
  - Case 2: plants with a load  $> 10,000$  PE discharging in SA. Implementing steps 20/40/60/100%, ie 150/300/450/750 plants
- WG Key questions
  - “*a pollution load  $\geq 150,000$  PE*”: how to define? Current approach: maximum entering load in 2023 (criterion “CBPO” defined in R2224-6 of territorial collectivities code)
  - Which criteria for prioritisation of
- Financial impact
  - Ex ante evaluation: 62 plants  $> 150,000$  PE and 720  $> 10,000$  for a cost of 241M€/y and 5,4bn in total

Implementing partners:



## DIRECTIVE 2024/3019 – FRANCE – TERTIARY TREATMENT – SPECIFIC CASE

- Article 7 paragraph 6: *For urban wastewater treatment plants that are under construction, under major refurbishment as regards their tertiary treatment or were commissioned after 31 December 2020 and before 1 January 2025, the requirements relating to the **nitrogen parameter** as referred to in this Article shall apply at the latest five years from the deadlines established in paragraphs 1 and 3.*
- WG Key questions
  - “under construction”: which **official document** to use as **reference** in case of public service, of delegated service of PPP?
  - “major refurbishment”: is a major refurbishment for phosphorus treatment **eligible**? Which **official document** to use as **reference for derogation** in case of public service, of delegated service of PPP?
  - “commissioned”: translation in French is “ordered” → **how to understand**: launch of studies, of works, starting date of plant operation?

Implementing partners:



## DIRECTIVE 2024/3019 – FRANCE: QUATERNARY TREATMENT – GENERAL CASE

- Situation
  - Case 1: plants with a load  $\geq 150,000$  PE: 63 plants in total. Implementing steps 20/60/100%, ie 13/38/63 plants
  - Case 2: plants with a load  $\geq 10,000$  PE discharging in SA. Implementing steps 20/40/60/100%, **unknown number of plants**
- WG Key questions
  - “a pollution load  $> 150,000$  PE”: how to **define**? Current approach: maximum entering load in 2023 (criterion “CBPO” defined in **R2224-6 of territorial collectivities code**)
  - Which **criteria for prioritisation** of agglomerations: environmental or health risks, plant age, work underway, land constraints?
  - How to apply for **small treatment plants** connected to agglomerations  $\geq 10,000$  PE
- Financial impact
  - Ex ante evaluation: 3 hypothesis for a cost of between 130 and 318M€/y and 2,7 to 6,7bn.€ in total

Implementing partners:



## DIRECTIVE 2024/3019 – FRANCE: QUATERNARY TREATMENT – TREATMENT EFFECTIVENESS

- Minimum removal rate: 80% on up to 12 listed substances (*annex I Table 3*)
- WG Key questions
  - Which flow to consider?
    - *Pollution load = [conc.] x Flow*, Note 2 state “dry weather” but FR legislation fix PC95 (95e percentile of all flow)
    - Proposal: dry weather = flow not influenced by rainwater, BUT current **sampling frequency 2/month**, how to handle **raining month**
  - Which substances to select?
    - By default minimum 4+2 from the 2 lists
    - Keep only the 12 proposed (found everywhere) or extend and how: prospective surveillance
  - How to calculate % abatement?
    - Note 2 in annex I fix the general rule: mean % removal for 6 substances >80% → plant comply (table 4 tolerance)
    - How to calculate performance if entering or discharge concentration is < LQ?

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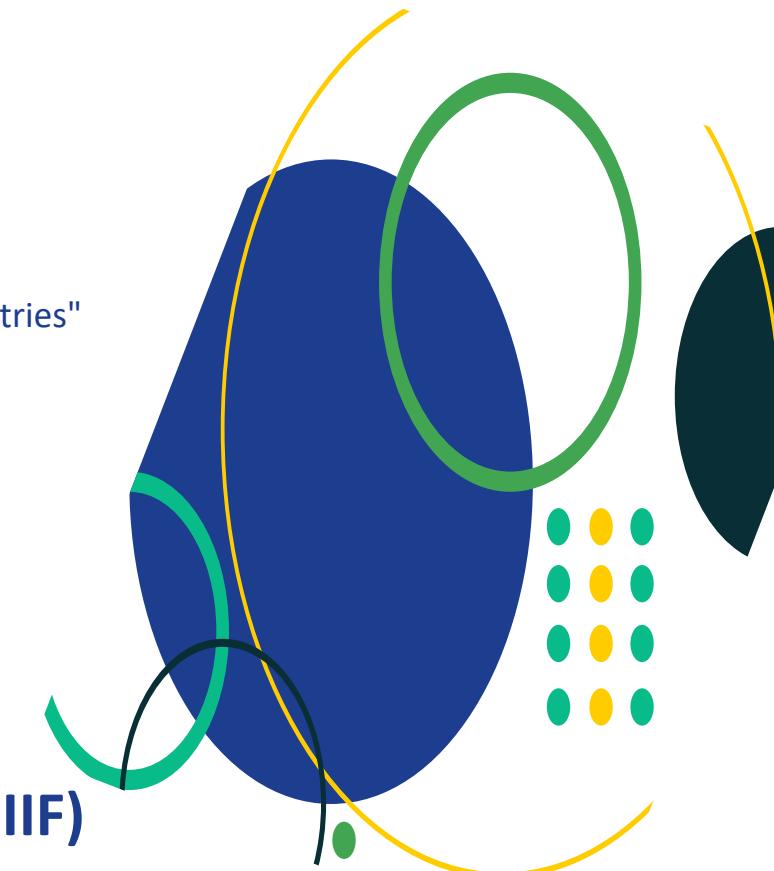
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# EU 4 GREEN RECOVERY EAST

Official title: "Recovery through a Circular Economy and Pollution Reduction in the Eastern Partnership countries"

*Webinar: implementation of the old and new UWWT*

- The European information system  
and the  
**Structured Implementation and Information Framework (SIIF)**



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## DIRECTIVE 91/271/EC – REPORTING: OVERALL FRAMEWORK

Authorities must **report every 2<sup>nd</sup> year** on urban wastewater collection and treatment

- **Article 15:** detailed situation (collection, treatment, discharge and receiving area)
- **Article 16:** summary national situation report
- **Article 17:** investment programme

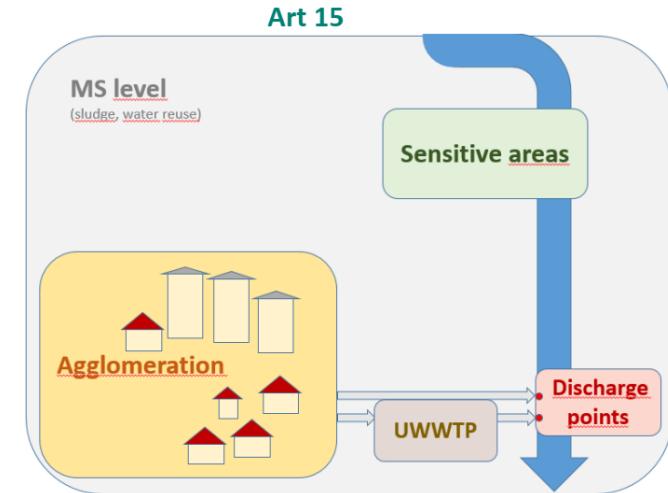
- Advantage: detailed situation per agglomeration and treatment plant available
- Caution: the data dictionary for Art17 allows
- Caution: Concepts and terminology partly differ from water statistics framework

Implementing partners:



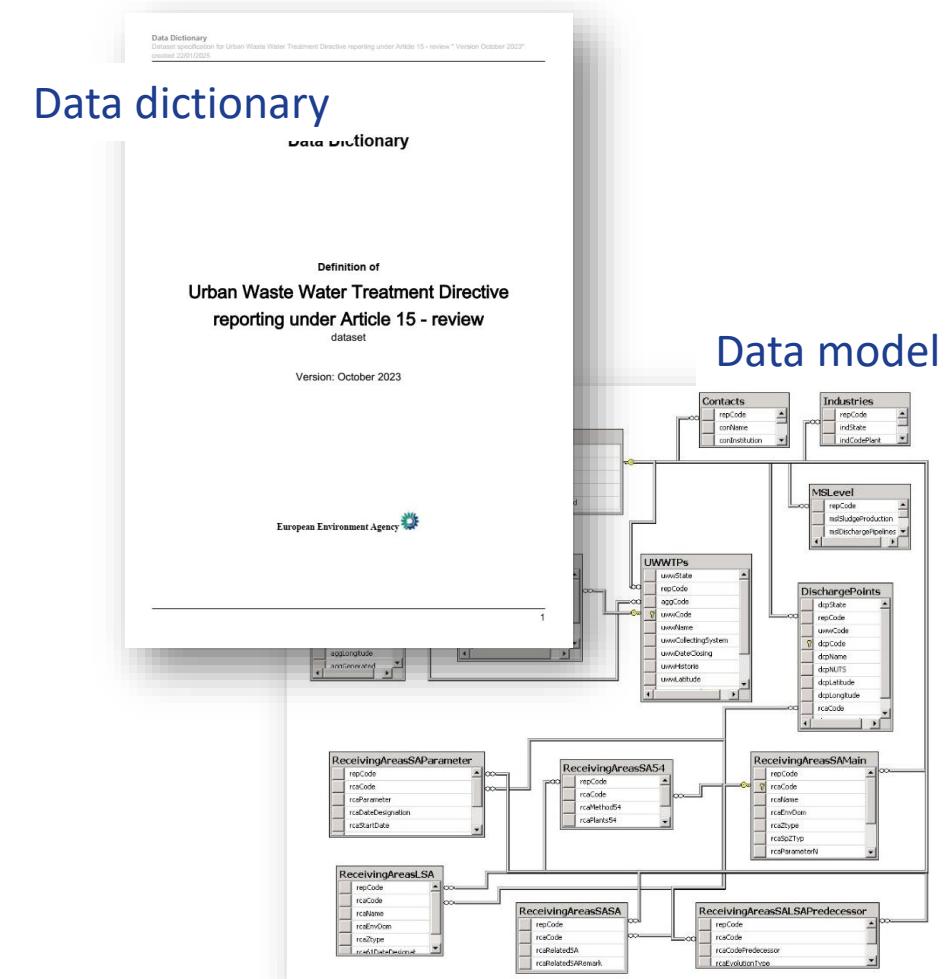
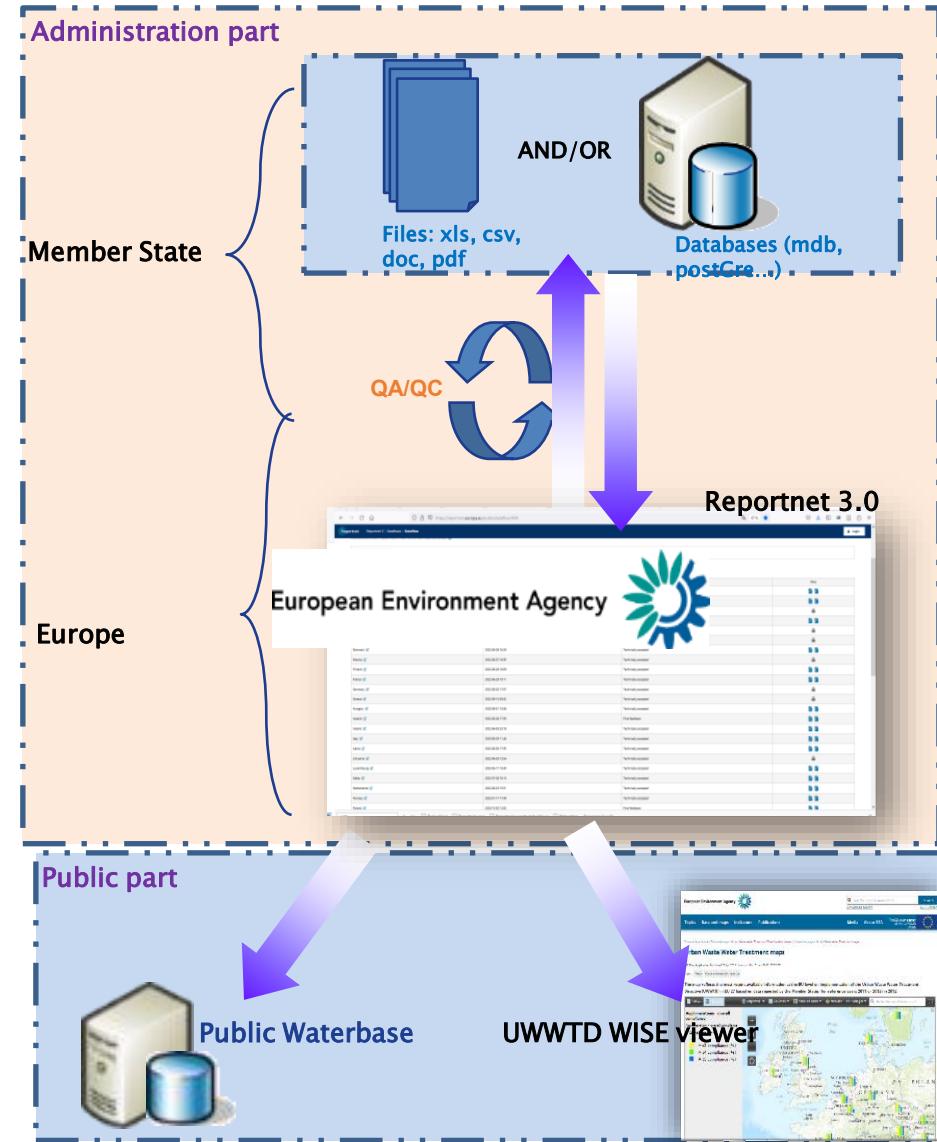
## DIRECTIVE 91/271/EC - ELECTRONIC REPORTING

- UWWTD 1991 – reported to EEA since 2008
- Helpdesk and technical support provided by ETC ICM, now ETC BE
- Compliance assessment performed by European Commission's consultants
- Continuous adaptation of quality control (QC) criteria
- Reporting platform updated to Reportnet 3 for reporting in 2022



Implementing partners:

# DIRECTIVE 91/271/EC - THE DATA COLLECTION CHAIN (FROM MS TO EEA)





# DIRECTIVE 91/271/EC - DATA VIEWER

## The viewer for urban wastewater treatment plants

**Urban waste water directive treatment plants data viewer**

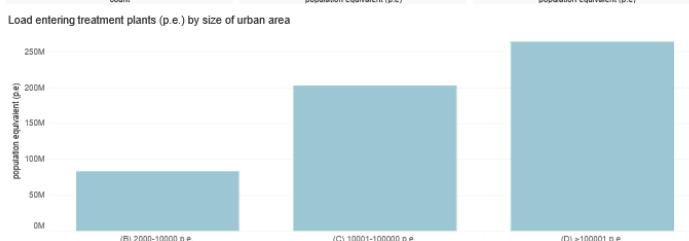
Dashboard | Published 20 Dec 2017 | Modified 02 Mar 2023

**Overview**

The UWWT data viewer enables an easy access analysis of the plants data reported under the article 15 of the UWWT.

[Analysis and data](#) > [Maps and charts](#) > [Urban waste water directive treatment ...](#)

The UWWT data viewer enables an easy access analysis of the plants data reported under the article 15 of the UWWT.



Implementing partners:

**umweltbundesamt**  
ENVIRONMENT AGENCY AUSTRIA

**Detailed situation**

it by the European Commission

[Overview](#) [Plants & systems](#) [Plant details](#)

**Urban waste water treatment plant details**

Member state	Year	Treatment plant	Plant status	Collecting system
(Select) 2022	2022	Ruhleben (DETP_BE01)	Active	Connected to a plant

**Ruhleben (DETP\_BE01), Germany**

Capacity (p.e.): 1 600 000  
Entering load (p.e.): 2 110 082  
Waste water treated (m3/year): 90,778,350

Collecting system is Connected to a plant  
Treatment: NP Removal, Other Treatment, Secondary Treatment, Primary Treatment

**Plant location**

**Plant and discharge point(s) distance: 12.25 km**

**Compliance monitoring results**

Year	Monitoring results BOD5 pass	Monitoring results COD pass	Monitoring results PTot pass	Monitoring results NTot pass	Monitoring results TSS
2022	-	-	-	-	-

**Annual load in tons per year**

**Incoming**

**Discharged**

**Discharge points connected to Ruhleben (DETP\_BE01):**

Discharge Point Code	Receiving area name	Type Of Receiving Area	River basin district	Dcp Waterbody ID	Receiving Area Parameter
2022 - DEOP_BE01	Deutschland	Art. 5(6) area (entire Member State) + Art. 5(4)	DE5000	DERW_DEBE_58296	aH - Nitrogen eutrophication
DETP_BE4	Deutschland	Art. 5(6) area (entire Member State) + Art. 5(4)	DE5000	DERW_DEBE_5838_2	aH - Nitrogen eutrophication

**Agglomerations served by the plant**

2022	Ruhleben (DEAO_BE01)
Generated load (p.e.)	2,110,082
Generated and entering plant (p.e.)	2,105,862
Rate of load collected (%)	99.80
Rate of load collected and entering this treatment plant (%)	99.80
Rate of load addressed to IAS (%)	0.13
Rate not addressed to IAS and not collected (%)	0.00
Raw sewage discharged (collecting system) (m3/d)	0.00

## The viewer for agglomerations

**Urban waste water agglomerations and receiving areas data viewer**

Dashboard | Published 26 Dec 2017 | Modified 30 Nov 2023

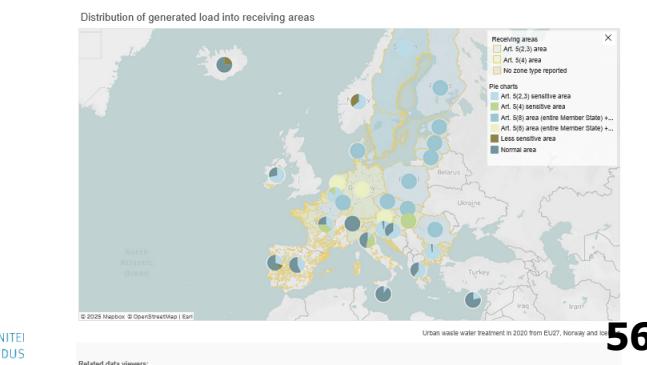
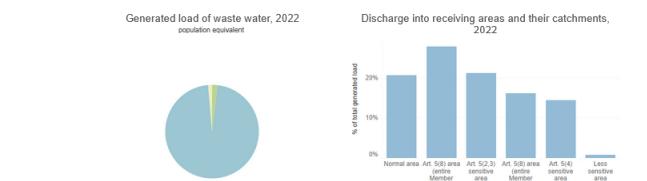
[Analysis and data](#) > [Maps and charts](#) > [Urban waste water agglomerations and receiving areas data viewer](#)

Explore pre-defined queries and filter the data according to several criteria, e.g. size of agglomeration, type of receiving area, member state(s), etc.

[Load](#) [Urban area](#) [Size & treatment](#) [Big cities](#) [Receiving areas](#)

Urban waste water agglomerations and receiving areas data viewer

The urban waste water treatment directive (UWWT) data viewer enables an easy access analysis of the agglomeration data reported under the article 15 of the UWWT. Explore pre-defined queries and filter the data according to several criteria, e.g. size of agglomeration, type of receiving area, member state(s), etc.





# DIRECTIVE 91/271/EC - REGISTER

- The register, a crucial tool to see compliance situation and evolution

[Glossary of terms](#) | [Key Concepts](#) | [Country specific notes](#) | [Agglomerations](#) | [WW Treatment Plants](#) | [Distance to target](#) | [Country overview](#)

**Waste water treatment plants**

Year:  2014  2016  2018  2020  2022

Plant name:  Agglomeration name:

Load Enter [p.e.]:  Capacity [p.e.]:  Volume Treated [m<sup>3</sup>/y]:  removal rate BOD5 [%]:  removal rate COD [%]:  removal rate N [%]:  removal rate P [%]:

Filter by spatial unit:

Filter by:  Overall Agg compliance  C  NR

Click on Treatment Plant to see further information

Data last updated: 02/12/2025 09:34:30

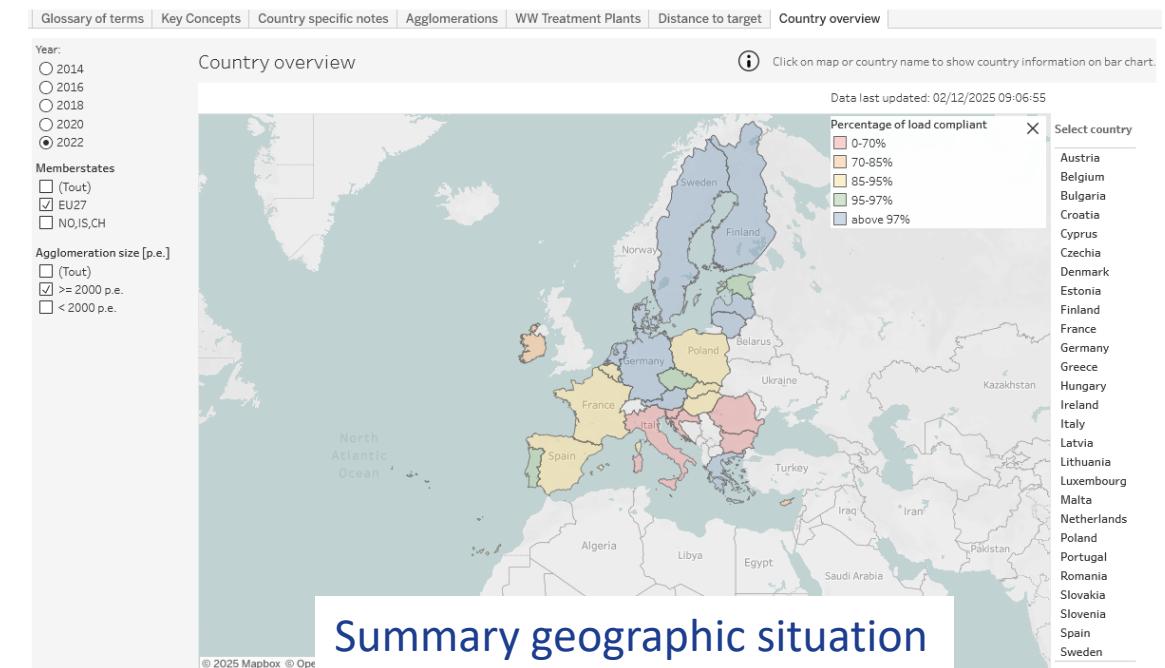
Plant name	Agglomeration name	Load Enter [p.e.]	Capacity [p.e.]	Volume Treated [m <sup>3</sup> /y]	removal rate BOD5 [%]	removal rate COD [%]	removal rate N [%]	removal rate P [%]
ABKM ABKM-Abwasserbeseitigung Kö..		4,093	7,000	168,515	99	97	94	95
ABUG-Abwasserbeseitigung Unteres G..		3,370	6,425	170,843	99	97	94	94
Abwasserverband ""Oberes Lavanttal..		7,960	8,000	858,843	98	94	73	85
Abwasserverband Kärntner Region		25,950	44,000	1,404,072	99	97	96	94
Abwasserverband Wörthersee West		25,034	44,000	1,435,183	99	97	97	93
Ager-West		58,811	76,000	4,489,277	98	95	72	90
AGRANA		5,000	5,000	365,000	99	99	80	85
Aich-Assach		3,668	3,500	159,354	98	92		89
Aigen im Ennstal		4,148	6,000	421,953	98	97	90	97
Aigen-Schlägl		7,396	9,000	718,786	99	95	90	92
Alberschwende		3,538	9,200	227,000	99	96	51	91
Allhaming		1,354	2,500	126,310	99	97		95
Altenfelden		1,082	2,300	208,089	97	95	95	74
Altenmarkt bei St. Gallen		3,264	7,500	185,714	99	98	91	99
Altheim und Umgebung		17,681	19,000	874,558	99	98	95	92
Ampflwang		3,939	6,600	602,069	98	92	88	89
Andau		4,963	13,500	302,591	99	98	92	92
Andorf		7,228	6,850	710,359	99	97	95	95
Anras		14,387	14,000	1,233,726	98	96	92	93
ARA Abtenau		9,560	12,088	914,476	98	96	90	83
ARA Abwasserreinigung im Waldvierte..		6,929	16,000	803,878	97	94	78	84
ARA Alland		4,417	10,000	403,845	95	94		98
ARA Allentsteig		2,443	6,600	322,397	98	95	96	83

Implementing partners:



UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION

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## ARTICLE 17 SUMMARY TABLE (DENV CONTRACTOR)

- Non compliant situations:

investment and number of sewer/plants

results after investment in term of p.e.

- Overall evolution of investment at country level & ratio per inhabitant

- Background information from art15 reporting

		2016	2018	2020
<b>Summary of information reported by national authorities as total for all individual non-compliant agglomerations</b>				
<b>Forecast for investment needs for non-compliant collecting systems and non-compliant treatment plants</b>				
Collecting systems	<b>Forecast for investment needed (as in national plan) [EUR million]</b>	no data	no data	no data
	<b>Amount of (planned) EU funding needed [EUR million]</b>	no data	no data	no data
	<b>Forecasting period [years]</b>	no data	no data	no data
Treatment plants	<b>Forecast for investment needed (as in national plan) [EUR million]</b>	no data	no data	no data
	<b>Amount of (planned) EU funding needed [EUR million]</b>	no data	no data	no data
	<b>Forecasting period [years]</b>	no data	no data	no data
<b>TOTAL FOR TREATMENT AND COLLECTION</b>		0	0	0
<b>Forecasting period [years]</b>		no data	no data	no data
<b>Number of investments planned</b>				
Collecting systems	<b>Planned works (expired deadlines) [No of works or agglomerations]</b>	no data	0	0
	<b>Planned works (pending deadlines) [No of works or agglomerations]</b>	no data	0	0
Treatment plants	<b>Planned works (expired deadlines) [No of treatment plants]</b>	no data	0	0
	<b>Planned works (pending deadlines) [No of treatment plants]</b>	no data	0	0
<b>Results after investment</b>				
Collecting systems	<b>Projected waste water load collected through collecting systems in/through planned works [p.e.]</b>	0	0	0
	<b>Projected waste water load addressed through IAS in/through planned works [p.e.]</b>	0	0	0
Treatment plants	<b>Projected waste water load entering in/through planned works [p.e.]</b>	no data	no data	no data
	<b>Design capacity in/through planned works [p.e.]</b>	no data	no data	no data
		<b>2016</b>	<b>2018</b>	<b>2020</b>
<b>Average investment costs reported by national authorities for the whole country</b>				
Collecting systems	<b>PAST annual investment costs (new and renewal) [EUR million]</b>	no data	no data	no data
	<b>Annual average for [years]</b>	no data	no data	no data
	<b>CURRENT annual investment costs (new and renewal) [EUR million]</b>	221	229	201
	<b>Annual average for [years]</b>	2017 - 2017	2019 - 2019	2021-2021
	<b>EXPECTED annual investment costs (new and renewal) [EUR million]</b>	262	219	223
	<b>Annual average for [years]</b>	2018 - 2021	2020 - 2025	2022-2027
Treatment plants	<b>PAST annual investment costs (new and renewal) [EUR million]</b>	no data	no data	no data
	<b>Annual average for [years]</b>	no data	no data	no data
	<b>CURRENT annual investment costs (new and renewal) [EUR million]</b>	105	87	19
	<b>Annual average for [years]</b>	2017 - 2017	2019 - 2019	2021-2021
	<b>EXPECTED annual investment costs (new and renewal) [EUR million]</b>	51	42	46
	<b>Annual average for [years]</b>	2018 - 2021	2020 - 2025	2022-2027
	<b>Evolution of the investments (PAST to CURRENT)</b>			
	<b>Evolution of the investments (CURRENT to EXPECTED)</b>	<span style="color:red">-14</span>	<span style="color:red">-56</span>	<span style="color:green">49</span>
<b>Population according to Eurostat [million]</b>		9	9	9
<b>Ratio: PAST investment/population [EUR/inhabitant/year]</b>				
<b>Ratio: CURRENT investment/population [EUR/inhabitant/year]</b>		37	36	25
<b>Ratio: EXPECTED investment/population [EUR/inhabitant/year]</b>		36	29	30
		<b>2016</b>	<b>2018</b>	<b>2020</b>
<b>Background information</b>				
	<b>Total design capacity (as reported in Art 15) [p.e.]</b>	21,567,393	21,579,063	21,796,853
	<b>Expected total design capacity (as reported in Art 17) [p.e.]</b>	22,536,446	22,246,325	22,137,770
	<b>Waste water load generated (as reported in Art 15) [p.e.]</b>	20,667,206	20,678,876	20,895,666
	<b>Waste water load collected in IAS (as reported in Art 15) [p.e.]</b>	132,787	121,797	122,919
	<b>Waste water load discharged without treatment (as reported in Art 15) [p.e.]</b>	no data	0	0
	<b>Waste water load entering the treatment plants (as reported in Art 15) [p.e.]</b>	14,516,875	14,734,732	14,520,065

Implementing partners:



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2016 2018 2020

58



# DIRECTIVE 91/271/EC – THE EU REPORT AND NATIONAL CHAPTERS (DGENV CONTRACTOR)

**12th Technical Assessment of UWWTI Implementation**  
EU Report – Final Version

Written by Benoit Fribourg-Blanc, Nicolas Chrysiplak, Jean Marc Berland, François-Xavier Imbert  
May 2024

Implementing partners:  
**umweltbundesamt**  
ENVIRONMENT AGENCY AUSTRIA

**European Commission**

**UWWTI National Summary Chapter 2020 Austria**

**1. Key messages**

This document provides an overview of the data reported by Austria for 2020 under the Urban Waste Water Treatment Directive ("the Directive"). The information presented in this document should be considered as the assessment by the European Commission and the main conclusions of the 2020 data submitted by Austria for the 12th reporting cycle. There is no link between the proceedings initiated before 2023. The reported information is without prejudice to any future infringement proceedings that the Commission may decide to launch.

In 2020, Austria had a population of **8.9 Mio** inhabitants, generating  $\geq 2,000$  p.e. each for a total generated load of **73.2 Mio** p.e. The load subject to Article 3 reached the target for collecting and treating waste water (**100% of agglomerations and generated load**).<sup>1</sup>

As regards the compliant agglomerations:

- The load in full compliance with Article 3 (collection) is equal to **100%** of the total load;
- The load in full compliance with Article 4 (secondary treatment) is equal to **100%** of the total load subject to compliance;
- 100%** of the load subject to Article 5 complies because the removal rates for N and P both exceed 75% and the removal rates for N and P both exceed 75%.

In 2020, Austria had reached the target for treating waste water (also known as **distance to target**):<sup>2</sup>

- The entire waste water load is connected to a collection system and treated in an appropriate system.

<sup>1</sup> Agglomerations are only legally compliant with the Directive when Articles 3, 4 and/or 5. For non-compliant agglomerations, the distance to target represents the real implementation status more accurately than compliance does.

<sup>2</sup> Collected load from agglomerations below 10,000 p.e. and discharging into sensitive areas.

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Office International de l'Eau  
Under Service Contract 090302/2022/276

**OECD**  
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**UNECE**

**UNIDO**  
UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

**RAMBOLL**

**EU4GREEN RECOVERY EAST**

**European Commission**

**UWWTI National Summary Chapter 2020 Austria**

**1. Key messages**

This document provides an overview of the data reported by Austria for 2020 under the Urban Waste Water Treatment Directive ("the Directive"). The information presented in this document should be considered as the assessment by the European Commission and the main conclusions of the 2020 data submitted by Austria for the 12th reporting cycle. There is no link between the proceedings initiated before 2023. The reported information is without prejudice to any future infringement proceedings that the Commission may decide to launch.

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- 100%** of the load subject to Article 5 complies because the removal rates for N and P both exceed 75% and the removal rates for N and P both exceed 75%.

In 2020, Austria had reached the target for treating waste water (also known as **distance to target**):<sup>2</sup>

- The entire waste water load is connected to a collection system and treated in an appropriate system.

<sup>1</sup> Agglomerations are only legally compliant with the Directive when Articles 3, 4 and/or 5. For non-compliant agglomerations, the distance to target represents the real implementation status more accurately than compliance does.

<sup>2</sup> Collected load from agglomerations below 10,000 p.e. and discharging into coastal waters may not need to be subject to secondary treatment.

**OIEau**  
Office International de l'Eau  
Under Service Contract 090302/2022/276

**EU4GREEN RECOVERY EAST**

**European Commission**

**UWWTI National Summary Chapter 2020 France**

**1. Key messages**

This document provides an overview of the data reported by France for 2020 under the Urban Waste Water Treatment Directive ("the Directive"). The information presented in this document should be considered as the assessment by the European Commission and the main conclusions of the 2020 data submitted by France for the 12th reporting cycle. There is no link between this document and any infringement proceedings initiated before 2023. The reported information is without prejudice to any future infringement proceedings that the Commission may decide to launch.

In 2020, France had a population of **67.5 Mio** inhabitants and reported **3,193** agglomerations generating  $\geq 2,000$  p.e. each, for a total generated load of **73.2 Mio** p.e. of which:

- 2,695 agglomerations (84%)**, generating **66,890,442 p.e. (91%)** of waste water, are in full compliance with the requirements of the Directive; and
- 498 agglomerations**, generating **6,337,540 p.e.** of waste water, did not comply with the requirements of the Directive.<sup>1</sup>

As regards the compliant agglomerations:

- The load in full compliance with Article 3 (collection and/or IAS) represents a percentage equal to **99.9%** of the total load;
- The load in full compliance with Article 4 (secondary treatment) represents a percentage equal to **91.6%** of the total load subject to compliance;<sup>2</sup>
- The load in full compliance with Article 5 (treatment more stringent than secondary) represents a percentage equal to **92.2%** of the total load subject to compliance (agglomerations generating more than 10,000 p.e. and discharging into sensitive areas). For the specific case of application of Article 5(4), 100% of the load subject to this article

<sup>1</sup> Agglomerations are only legally compliant with the Directive when their entire generated load is compliant (Articles 3, 4 and/or 5). For non-compliant agglomerations, the distance to target is calculated for each Article based on the non-compliant fraction. Distance to target represents the real implementation status more accurately than compliance does.

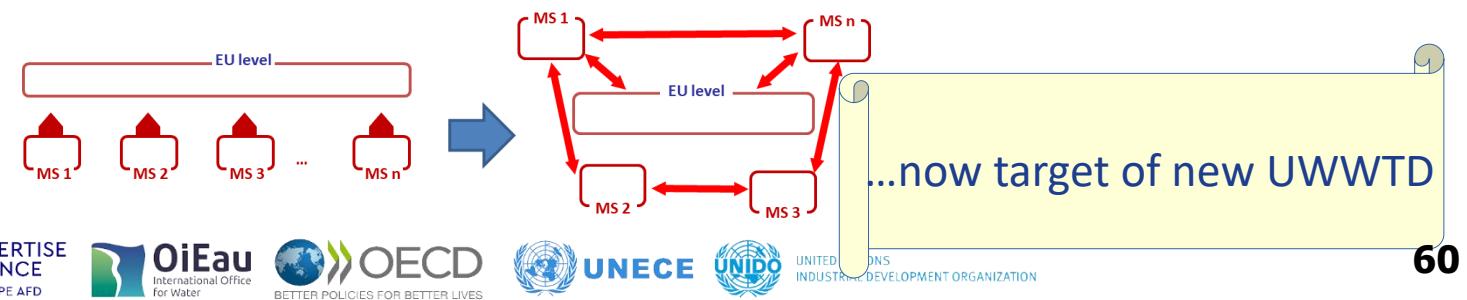
<sup>2</sup> Collected load from agglomerations below 10,000 p.e. and discharging into coastal waters may not need to be subject to secondary treatment.

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Office International de l'Eau  
Under Service Contract 090302/2022/276

**EU4GREEN RECOVERY EAST**

## DIRECTIVE 91/271/EC – THE UWWTD SIIF: ORIGIN

- Communication COM/2012/095 on “*Improving the delivery of benefits from EU environment measures: building confidence through better knowledge and responsiveness*”
- The communication introduced concept of “**Structured Implementation and Information Frameworks**” (SIIFs)
  - to clarify main provisions of a Directive,
  - to identify main types of information and demonstrate how EU law is being implemented,
  - the first test should be conducted on UWWTD.
- To implement the concept:
  - a document describing key component of the system was developed (2013)
  - a website demonstrating the concept on UWWTD reporting was developed for few MS (2014)
  - The website was deployed for all MS (2015-2020)
  - Recognising UWWTD reported data are of interest for many different users (thematic domain experts, general public, EU services...), the system was the first step for a shift from bottom up reporting to information exchange





## DIRECTIVE 91/271/EC - THE UWWTDSIIF: WHAT IT IS

The UWWTDSIIF platform is a tool to use national validated dataset and **improve public access to information**

- It is not (currently) a collection tool
- It is not a reporting tool
- It is provided for free, as support for MS, not mandatory
- It can evolve in the future with contributions from users

The UWWTDSIIF platform can be used for many different purposes:

- **Visualise** data collected and reported,
- **Assess** the MS/local situation as regards UWWTDSIIF implementation,
- **Check**, identify errors, and correct data,
- **Download** sub sets of data,
- **Link** to own maps,
- ...

The UWWTDSIIF platform was developed & publicly available for EU28 MS in the period **2013-2020**

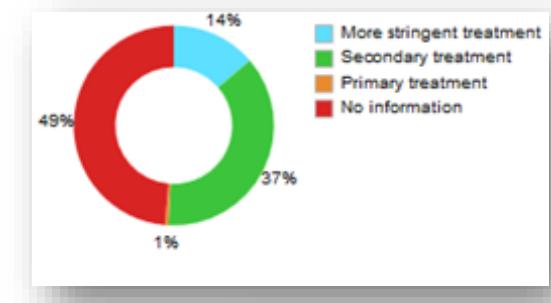
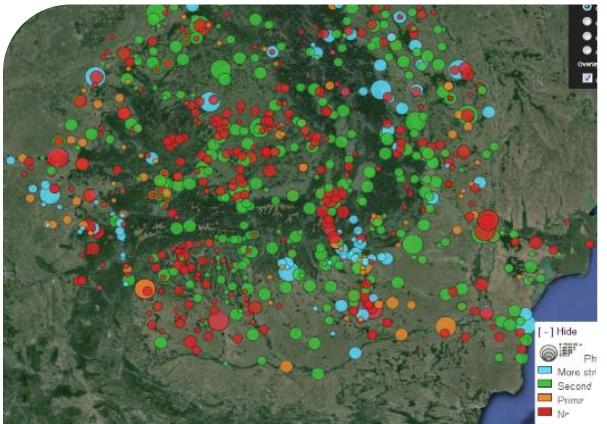
*Implementing partners:*



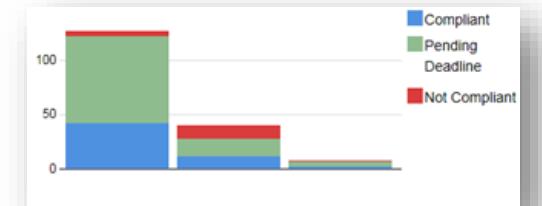
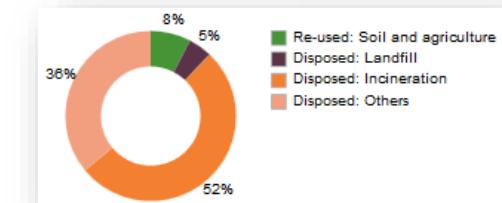
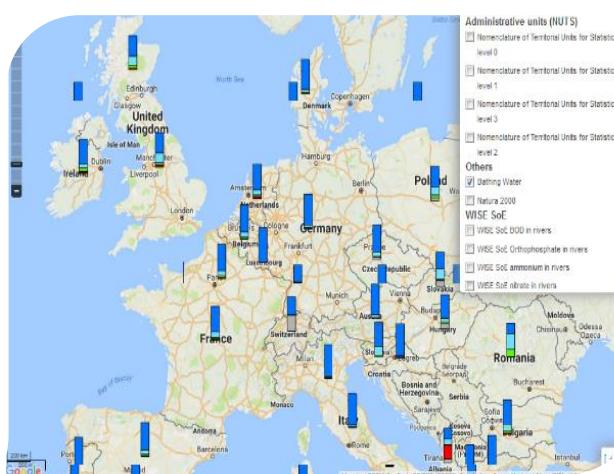
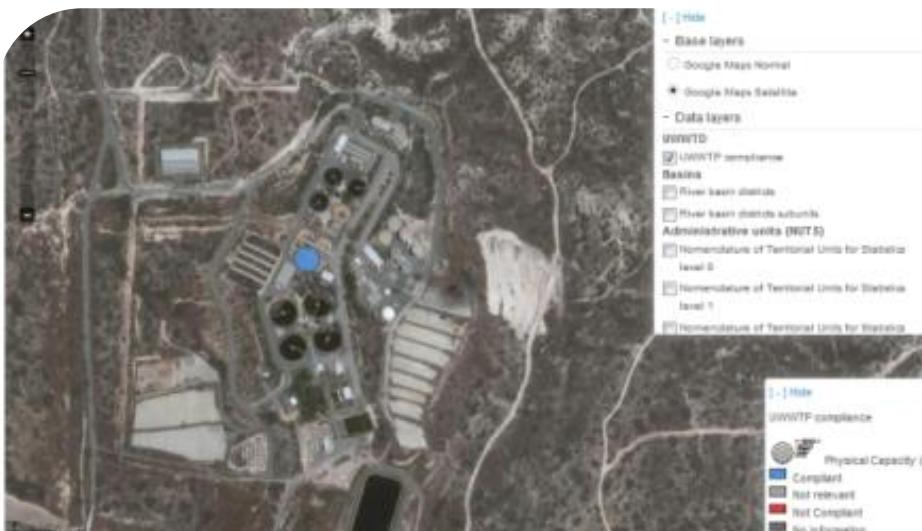
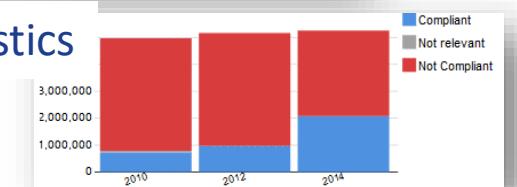
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# DIRECTIVE 91/271/EC - THE UWWTI SIIF: PUBLIC PART (1/3)



## Summary statistics



Implementing partners:

umweltbundesamt<sup>®</sup>  
ENVIRONMENT AGENCY AUSTRIA

EXPERTISE  
FRANCE  
GROUPE AFD

OiEau  
International Office  
for Water

OECD  
BETTER POLICIES FOR BETTER LIVES

UNECE

UNIDO

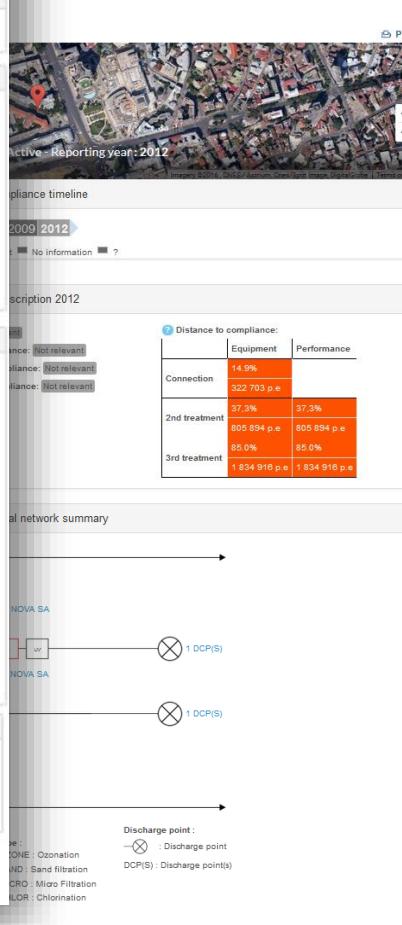
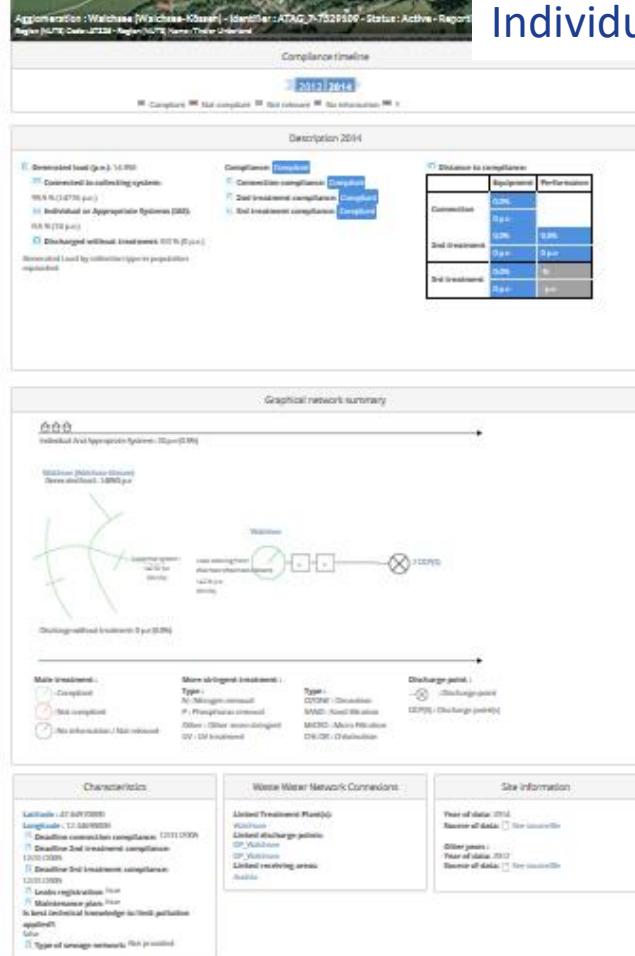
UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION

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## DIRECTIVE 91/271/EC – THE UWWTD SIIF: PUBLIC PART (2/3)

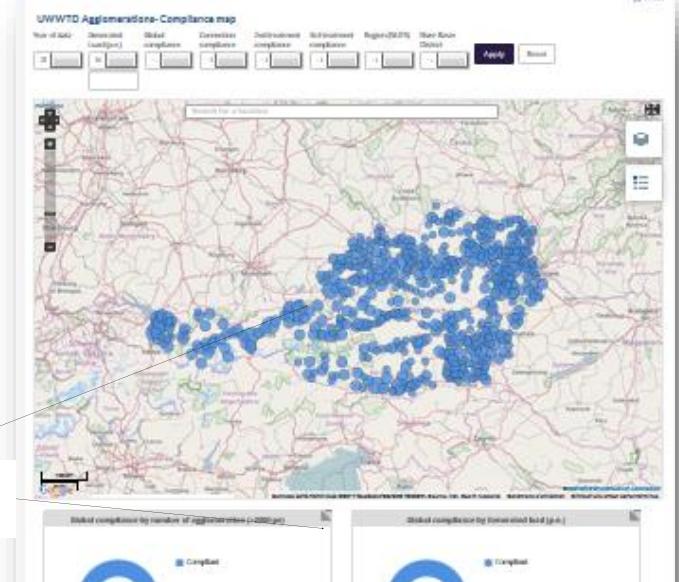


## Individual object Fiches



## Lists

## clickable



IEE results / Download results									
Name	Identifier Code	Total GW/MT capacity (kW)		Region (WEEE)	RBD	Initial compliance	Correction compliance	2nd compliance	3rd compliance
		Generated load (kW)	Allocated capacity (kW)						
WEEE (EU, Norway)	ATM1_9	4000000	2000000	AT110 West-Europ.	AT100	Compliant	Compliant	Compliant	Compliant
EU (EU, Norway)	ATM2_0	900000	900000	AT112 West-Europ.	AT100	Compliant	Compliant	Compliant	Compliant
Umweltbundesamt	ATM2_1	4000000	4000000	AT113 West-Europ.	AT100	Compliant	Compliant	Compliant	Compliant
Arbeitskreis (Bundeswehr)	ATM1_9	800000	800000	AT103 Niedersachsen und Umgang	AT100	Compliant	Compliant	Compliant	Compliant
Realt	ATM1_6	4000000	4000000	AT121 West	AT100	Compliant	Compliant	Compliant	Compliant
Arbeitskreis (Bundeswehr und Umgang)	ATM2_7	700000	2000000	AT102 Niedersach	AT100	Compliant	Compliant	Compliant	Compliant
Ministerium (Bundeswehr)	ATM1_9	3000000	3000000	AT120 Brandenburg Bremen	AT100	Compliant	Compliant	Compliant	Compliant
Klaus Schaefer (Bundeswehr Ministerium)	ATM2_3_11	300000	300000	AT121 Bayern Hessen	AT100	Compliant	Compliant	Compliant	Compliant
Hausgeräte (Bundeswehr Ministerium)	ATM2_0	2100000	2000000	AT111 Nordrhein Westf.	AT100	Compliant	Compliant	Compliant	Compliant
Guard Service (Bundeswehr Ministerium)	ATM2_3_119	2700000	2700000	AT114 Wallonien	AT100	Compliant	Compliant	Compliant	Compliant
Hand (Bundeswehr)	ATM1_10	2710000	2710000	AT107 Bremen	AT100	Compliant	Compliant	Compliant	Compliant



# DIRECTIVE 91/271/EC - THE UWWTD SIIF: PUBLIC PART (3/3)

**Download**

**Data**  
In this section you can access to the data used on the platform and download them.

Select the year:

2014

Title	Coverage	Files available
Full UWWTD reported data	Country	xml
Agglomerations	Country	xml, csv, shp, kmz
Urban Waste Water Treatment plants	Country	xml, csv, shp, kmz
Discharge points	Country	xml, csv, shp, kmz
Sensitive areas	Country	xml, csv, shp, kmz

**Metadata**  
In this section you can access the metadata files for each of the four geographical layers covered by UWWTD (91/271/EEC).

Title	Coverage	Download	View
Agglomerations	Country	xml, pdf	html, xml, pdf
Urban Waste Water Treatment plants	Country	xml, pdf	html, xml, pdf
Discharge points	Country	xml, pdf	html, xml, pdf
Sensitive areas	Country	xml, pdf	html, xml, pdf

**Services**  
In this section you can access the webservices for each of the four geographical layers covered by UWWTD (91/271/EEC).

WebService	DescribeFeatureType: description of the information layers, name and type of fields.	GetFeature: access to data in GML format
Agglomeration	Agglomeration	Agglomeration
Treatment plant	Download: Urban/Waste/Water/Treatment/Plant	Urban/Waste/Water/Treatment/Plant
Discharge point	DischargePoint	DischargePoint
Receiving area	ReceivingArea	ReceivingArea

**How to make references to this website?**  
All the items description page (agglomeration, treatment plant, discharge point and sensitive areas) can be accessed directly, and then referenced on other websites.  
This can be done by using the following URL pattern:  
<http://uwwtd.oisau.fr/{country}/{name of the element}/{ID of the element}>

For instance:

- [/Austria/agglomeration/ATAG\\_6-M36172750](http://uwwtd.oisau.fr/Austria/agglomeration/ATAG_6-M36172750)
- [/Austria/treatment-plant/ATTP\\_6-M32804130](http://uwwtd.oisau.fr/Austria/treatment-plant/ATTP_6-M32804130)
- [/Austria/discharge-point/ATDP\\_6-M34115890](http://uwwtd.oisau.fr/Austria/discharge-point/ATDP_6-M34115890)

If you want to reference to a specific year, you simply need to add the year in the URL as follows:

For instance:

- [/Austria/agglomeration/ATAG\\_6-M36172750/2014](http://uwwtd.oisau.fr/Austria/agglomeration/ATAG_6-M36172750/2014)
- [/Austria/treatment-plant/ATTP\\_6-M32804130/2014](http://uwwtd.oisau.fr/Austria/treatment-plant/ATTP_6-M32804130/2014)

Implementing partners:



# DIRECTIVE 91/271/EC - THE UWWTD SIIF: PRIVATE PART (1/2)

The editorial menu allows the website administrator / editor to manage the UWWTD SIIF website :

The screenshot shows the 'Editorial menu' section of the website. The menu items are:

- Add / manage a data report
- Add Article 17 information
- Bulk data deletion
- Register
- Translate interface
- List Error

Each item is accompanied by a blue callout box with a description:

- To add or edit an annual “dataset” for a specific year to populate the website.
- In order to add information about “Article 17” for Agglomerations and Treatment plants.
- Used to delete an annual dataset prior to reload the data
- To generate the national register
- To translate the website in your national language
- To list all error generated during the import of your data

Implementing partners:

## DIRECTIVE 91/271/EC – THE UWWT D SIIF: PRIVATE PART (2/2)

## Automatically generated excel register

- 20 sheets with tables and graphs
- Basis for national report 2012-2020



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EU4GREEN  
RECOVERY  
EAST

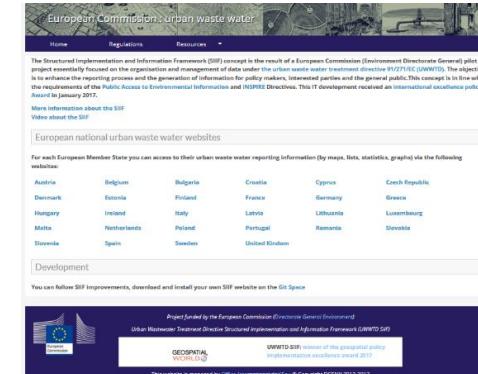
# DIRECTIVE 91/271/EC - THE UWWTI SIIF, A TOOL FOR NATIONAL PORTAL

- Recognised by EU Commission to replace 91/271 Art 16 report
- generic open source wastewater website
  - showing and using the data,
  - disseminating the data,
  - tool *free to be reused*,
  - including many functionalities,
  - with maps, graphs, tables,
  - with individual fiches...
  - with updates which can be transferred to all platforms
  - A *geospatial approach reusable everywhere*

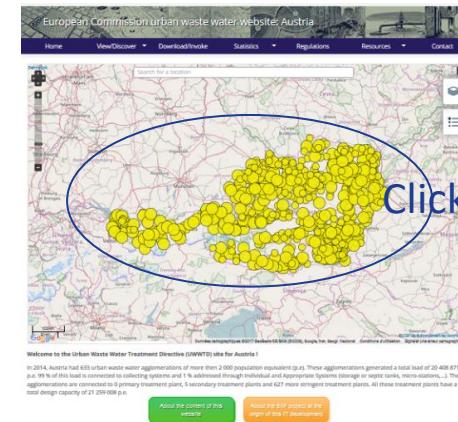


Received an award from OGC: *geospatial policy implementation award*"

Access for all EU27



National access



Clickable dots

Implementing partners:

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# THANK YOU



- **Benoît Fribourg-Blanc**
- European project manager
- OiEau



- **Katharina Lenz**
- UWWD Expert
- UmweltBundesAmt Austria

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