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**HOW TO HANDLE COURT PROCEEDINGS INVOKING NON-
COMPLIANCE WITH EU WATER LAW**

Organised by Academy of European Law



URBAN WASTE WATER TREATMENT DIRECTIVE (91/271/EEC)

Andrej Kmecl, material prepared April 2017



Context: historical

- London, 1858: „The Great Stink“
 - Almost 3 million people
 - Very little industry in modern sense
- „...it stinks, and whoso once inhales the stink can never forget it and can count himself lucky if he lives to remember it...“ (Contemporary newspaper report)
- „Her Majesty's Government have nothing whatever to do with the state of the Thames“ (John Manners, First Commissioner of Works)



Point out that the problems addressed by the directive are anything but new – one of the first recorded events related to pollution caused by urban waste water

At that time London had quite elaborate sewer system – however, it discharged directly to Thames

Very important parallels to the present situation with urban waste waters:

- Dense population
- Many decentralised sources
- Industry and trade: typical examples - skin tanneries, slaughterhouses, breweries, cotton mills – again, parallels to
- Common denominator – huge quantities of organic matter
- Fun fact: some authors mention „the dawn of flushing toilettes“ as one of the contributing factors

Consequences (low water level, high temperatures) disastrous, for example: the Parliament had curtains soaked with disinfectant in order to keep at least basic functions possible

Extremely important: the government would have nothing to do with it – obviously,

legal regulation is necessary

Historical solution: move the point of discharge by building huge sewer (Embankment) – but that doesn't mean that the problem was in any way solved, it only touched less people

Context: historical

- In 1980, only about 45% of urban waste water in the Community received any treatment before discharge
- Lower parts of many European rivers virtually dead
- Increasing problems with algal blooms in coastal waters
- Huge gaps between Member States in treatment standards
- 1991: Council Directive of 21 May 1991 concerning urban waste water treatment (91/271/EEC)



120 years later – not much has changed

Today EU = 500 mil people, at that time less, but still a huge number, 95% living in urban agglomerations, presenting tremendous burden for the environment

Reason for the dead rivers not only industry, but predominantly urban waste water, which turned out to be major (largest single) source of pollution

At that time, algal blooms in marine waters became frequent and serious enough to come to wider public's attention – at that time still much questioning about the reason

NOT north/south or east/west divide, simply very different situations, traditions and attitudes

Directive – extremely necessary - a result of much political bargaining, for the reason outlined above – resulting in many compromises or wide areas of discretion – will mention some of them

One of the results – Directive is still valid and efficient, largely unchanged, even after

the reform of the Water Framework Directive

Context: environmental

- Urban waste water: domestic waste water or its mixture with industrial waste water and/or run-off rain water (Article 2)
 - Domestic waste water: w. w. from residential settlements and services, originating predominantly from human metabolism and household activities
 - Special provisions for biodegradable industrial w. w. (Article 13/ Annex 10) from industries like processing of milk, potato, fish...
- Common denominator: rich in organic substance = nutrients
- Nutrients = fertilizer



To consider the environmental impact, first have to define what we are talking about

Primary/defining component: domestic waste water

- Residential settlements and services (cleaning, hospitality, trade)
- Very polite definition of the origin: predominantly from human metabolism
- Household activities: preparation of food, washing, cleaning

Definition of „industrial waste water“ expectedly discharged from premises used for carrying out industry and trade

HOWEVER, special provisions for industries with common denominator of food processing or similar (reminder of historical context - London 1858)

Extremely important for growth of plants: nitrogen and phosphorus in biologically available form – phosphates and nitrates – „limiting factors“

Almost any hobby gardener will know: phosphates and nitrates in various proportions are basic ingredients of fertilizers

Therefore, we are basically dumping organic fertilizer in waters – then how it comes they are dead? – As previously mentioned gardener, he will also know the consequences of wrong fertilizer

Context: environmental

- Eutrophication (Article 2)
 - enrichment by nutrients, esp. compounds of nitrogen and/or phosphorus
 - causing accelerated growth of algae and higher forms of plant life
 - undesirable disturbance to the balance of organisms
 - undesirable disturbance to the quality of the water
- Organic matter is broken down (oxidized) by microorganisms
- Quantity of oxygen used in this process = Biochemical Oxygen Demand, BOD



What we get after discharge of urban waste water is water with disproportionate/unnatural quantities of nutrients

State called eutrophication – subject of definition in the Directive

- First characteristic – already covered, enrichment by nutrients
- Second – logical and expected consequence of the first characteristic, but also depending on a variety of other environmental factors (soil, temperature...)
- Third – quantity of algae and „higher forms of plant life“ begins interfering with conditions for life of other aquatic organisms – competition for food, light, and most important oxygen
- Reminder of news on images of „pea soup“ or sea, so densely packed with algae, that people can virtually walk on water – these plants have relatively short life span – when they die, they begin to break down

But what is the way from extensive plant life to disaster of unbearable stink described before and dead rivers?

Oxygen needed for the so-called bio-oxidation is dissolved in water, but available quantity is limited – once used up, nothing else can survive – anaerobic processes, i. e. rotting begins

The process gives us two useful hints: how to measure degree of pollution and how to help water to clean „itself“ – both questions are bound to quantity of needed/available oxygen

Context: environmental

- BOD as degree of organic pollution of water
 - Unpolluted water: ≤ 1 mg/l
 - Moderately polluted water: 2 - 8 mg/l
 - Severely polluted water: ≥ 8 mg/l
 - Untreated sewage: up to 600 mg/l
- Measured over 5 days: BOD₅
- Number of inhabitants not necessarily proportional to pollution, therefore „population equivalent“, p.e.
- 1 p.e. = BOD₅ of 60g/day



The more the pollution is organic, the more oxygen microorganisms will need to break it down

Typical mountain stream as a symbol of a clean water: well oxygenated and with little organic matter; and opposite – a river flowing through marsh – there is a little possibility to add oxygen (by aeration through rapids and/or falls) and there is a lot of organic matter

Note: the ratio of polluted water/raw sewage – 1l of sewage = 100l of severely polluted water (approximate production of sewage: up to 150l / person / day)

Process of a measurement / oxidation takes up some time, therefore the result varies over the time. The time of measurement has been standardised to 5 days, in which some 68% of organic matters get decomposed.

As mentioned before, habits and residential services vary geographically, therefore also composition of domestic waste water varies – despite that, there is a need for a standard to measure the industrial waste water.

Every day, an average person produces organic matter in sewage requiring 60g of oxygen (BOD) for decomposition over 5 days

Therefore, 1 p. e. is roughly equivalent to an average person or his/her load to surface waters through waste water

Context: environmental

- Treatment (Article 2)
 - Primary
 - Physical/chemical process, involving settlement of suspended solids, reduction of BOD5 by $\geq 20\%$ and suspended solids by $\geq 50\%$
 - Secondary
 - Generally involving biological treatment with secondary sedimentation, to the requirements established in Annex 1 (example: BOD5 ≤ 25 mg/l)
 - „More stringent“ than secondary (Article 5) (tertiary)
 - Standards set in Annex 1, concerning concentration or reduction of phosphorus and nitrogen, aiming at further reduction of nutrients



As we all know – sewage can be processed – in description and definitions of the processing, the presentation will follow the methodology of the Directive – this is still a part of the „definitions“

Much of the organic matters is in the form of suspended solids – therefore a great deal of the desired result can be achieved already with settlement – in many cases by simply leaving water stand for a while – additionally, bubbling as a form of aeration increases available quantity of dissolved oxygen, needed for bio-oxidation and creates floating „cream“ of solids which can be skimmed

By-product: huge quantities of mud, „sludge“ – also regulated by the Directive, will be mentioned later

Biological treatment: mostly indigenous microorganisms are used, some others may also be added – partly to mimic natural processes which take place in rivers (self-cleaning), partly to induce clotting and thereby further settlement of solids

Note the improvement in BOD5 /possible influence on clean water as compared with untreated sewage as presented on the earlier slide

With the „more stringent“ (tertiary) processing things get complicated – widely varied array of processes can be used– chemical as well as biological, adapted to the requirements and possibilities – of course, biological ones are preferred economically as well as environmentally – example: artificial wetlands are a biological process aiming at using up or binding nutrients

Context: legal

- Water framework directive
 - Policy framework, methodology
 - Objectives
 - Interpretation
- Other directives regarding water quality, if relevant for receiving water
 - Bathing water directive - microbiological (faecal) contamination
 - Drinking water directive - 48 microbiological and chemical parameters
- Other environmental legislation
 - Waste management? (CJEU C-252/05, Thames Water Utilities)



As Water Framework Directive has already been discussed, we will not lose too much time over it – however, it is very important in terms of policy framework and methodology (river basin as a unit – definition of relevant areas bound to it), objectives (all waters of at least „good“ quality) and interpretation

Other “relevant” Directives are expressly referenced in several places. As it will be shown later, Waste Water Directive sets requirements not only by defining standards for performance of processing plants or even discharges from them, but also by the quality of receiving waters. Two most important Directives: Bathing Water and Drinking Water Directives.

Bathing Water Directive is closely related / complementary to the WWD – as we recall, domestic waste water is mostly a product of human metabolism – categorisation of bathing waters is based on pollution with two species of bacteria typical for one type of „products of metabolism“, that is faeces

Requirements of both of these directives count among determining factors in determination of sensitive areas

Case: should waste water or sludge be treated as waste (with all consequences stipulated by relevant secondary legislature)? – no, because it is a subject to special legislation stipulating appropriate treatment, except for waste water escaping a leaking collecting system, because it is **not** subject to treatment according to Directive

Scope - Article 1

- Collection, treatment & discharge of urban waste water
- Treatment & discharge of waste water from certain industrial sectors
 - Planning
 - Regulation
 - Monitoring
 - Information and Reporting



Primarily, the Directive determines conditions under which urban waste water must be collected and treated

As mentioned before, some industrial branches, which produce comparable waste waters, are also included

Other industrial sectors are regulated to a very limited degree, without interference with the core scope of the Directive

The activities which are subject to regulation may be divided into planning, regulation, monitoring and reporting, which is also the methodology followed by the Directive (and this presentation)

Objective - Article 1

- To protect the environment from adverse effect from these waste water discharges
 - All urban waste water from relevant agglomerations collected and treated
 - Standard of treatment defined not only by parameters of permitted discharges, but also by quality of receiving waters
- The directive's objective (...) goes beyond the mere protection of aquatic ecosystems and seeks to conserve man, fauna, flora, soil, water, air and landscapes from any significant adverse effects of the accelerated growth of algae and higher forms of plant life resulting from discharges of urban waste water (CJEU in C-280/02 Commission v. France)



How does the Directive aim to reach the objective:

-At the first glance, the Directive seems to be very radical in its demands: *no* exceptions (ALL waste water)... as we shall see later, there are notable exceptions – however - formulated in a way that the Directive still covers some 95% of EU population – close enough to „all“?

-Very important: no matter how efficient the processing plants are, receiving waters have to meet relevant standards – which is the only way to achieve objective – example: the Water Framework Directive sets an objective to all waters at least to be kept at the „good“ level

Second point: the CJEU provided a comprehensive and quite decisive summary of the directive's objective; environment is understood in the widest sense of the word

Agglomeration

- Area where population and/or economic activities are sufficiently concentrated for urban waste water to be collected and conducted to treatment plant or final discharge point
- No further definition of „sufficient concentration“
- Example of national regulation: 10 p.e. in a square of 100 x 100 m, touching another such square in at least one corner
- Relevant size thresholds (after expiration of deadlines): 2.000 and 10.000 inhabitants
- Commission in C-316/06 (Commission v. Ireland): existence of agglomeration is independent of existence of collecting system and of presence of treatment plant



This definition is leaving a wide area of discretion to MSs, seemingly defining the need for collection and processing with nothing more than „sufficient concentration“, without setting any objective/quantitative criteria

Therefore, the standard of „sufficient concentration“ remains to be set by MSs, taking into account their notion of how concentrated population must be to pass as an agglomeration – in many cases, transposition instruments are mere translations of the directive, therefore the question of existence of an agglomeration has to be addressed on a case-to-case basis. Surprisingly, so far no real disputes have occurred in this regard.

Transposition instruments could include definition by objective criteria – an example from a highly normativity system is given. Anyway, a relatively well developed survey and population registration system is necessary for implementation of such criteria.

In the Directive, a seemingly complicated system of combinations of agglomeration sizes, obligations for each size and deadlines is defined. However, after the deadlines get expired (they already have, except in very few individual cases) only two size thresholds remain relevant, as we shall see later.

As said before, the loose definition of agglomeration can be very tempting for interpreting it „upside down“ – if there is no collecting system and treatment plant, there obviously isn't any sufficient concentration of population and/or economic activities to justify its existence, and therefore no agglomeration in the sense of the Directive – the CJEU rejected such logic quite shortly and decisively.

Collection of urban waste water (Article 3)

- All agglomerations with p.e. of more than 2.000 must be provided with collecting systems
- Collecting system: a system of conduits which collects and conducts urban waste water
- If not justified because
 - it would produce no environmental benefit
 - or it would involve excessive costindividual or other appropriate systems (IAS), achieving same level of environmental protection shall be used
- Best technical knowledge not entailing excessive costs, regarding (*inter alia*)
 - volume and characteristics of urban waste water
 - limitation of pollution due to storm water overflows



The first important size of the threshold is a sizeable village or a small town – 500 to 600 families/houses

All: without exception (there are some exceptions in enforcement, which will be described later)

The definition of a collecting system may seem superfluous or self evident, but leaves open an important question: does it have to extend to every single dwelling/source of waste water? The answer lies in the standards which are mentioned below.

The provision allowing IASs may be considered as some kind of (very limited) exception to the general obligation after all. However, the two conditions for this exception are (1) quite strict/demanding and (2) seemingly open for interpretation. However, the CJEU interpreted the first of them very narrowly. Furthermore, the final requirement of „achieving same level of environmental protection“ makes the first condition rather dubious: *every* IAS which achieves same level of environmental protection (as collecting system) will mean that the collecting system will produce no environmental benefit. Obviously, environmental benefit has to be observed in a wider sense, but no authoritative interpretation in this regard has yet been given by the CJEU or the Commission.

Two typical examples of standards which have to be followed are given – further standards are listed in Annex I

IAS has to be justified, usually expensive to set up properly and maintain intensively – typical for „new“ Member States because of – at times – fast pace of investment not always followed by the infrastructure development.

Processing of urban waste water (Article 4)

- All urban waste water entering collecting systems shall before discharge be subject to secondary or equivalent treatment
 - for all discharges from agglomerations of more than 10.000 p.e.
 - for discharges to fresh-water and estuaries from agglomerations of more than 2.000 p.e.
- Calculation of the load: based on maximum average weekly load entering treatment plant during the year, excluding unusual situations (heavy rain)



Again: *all* means without any exceptions – the CJEU pointed that out on several occasions

Entering collecting systems: not including IAS, as they have already been taken into account by setting standards for them (previous slide)

Urban waste water not entering collecting systems NOR subject to IES: general waste? – According to the CJEU, yes

Minimum standard is secondary treatment as defined before, with results specified in annexes (therefore it is easy to recognise whether treatment is really equivalent)

Perhaps this is the right time to mention the reason of annexes – enable timely tracking of technical/scientific developments through simplified legislative procedure

10K p. e. – the second relevant threshold – regardless of where they discharge
2K p. e. – lowest relevant threshold, in this case fresh-water or estuaries

Estuary: a transitional area at the mouth of the river (fresh/coastal waters) usually very valuable biologically

Marine environment is less vulnerable/exposed to eutrophication? – perhaps, but different treatment also seems to be a political solution

Requirement: calculation of the load refers to the planning phase – actual performance prescribed

elsewhere and will be discussed later

Processing - exception (Article 4)

- Urban waste water discharges to waters in high mountain regions
 - over 1.500 m above sea level
 - where it is difficult to apply effective biological treatment due to low temperaturesmay be subjected to less stringent treatment...
- ... but only if detailed studies indicate that such discharges do not adversely affect the environment



NOTE: to keep the timing, this feature should only be mentioned briefly

Again, two cumulative conditions for the exception, taking into account specific climate conditions which prevent efficient biological treatment

„less stringent treatment“: less than secondary or equivalent, regarding its results

However, as a rule, mountainous environment is even more sensitive because of fragile balance of species adjusted to low temperatures and few nutrients

Therefore: this issue comes into question only in rare cases (IES don't work at low temperatures either)

Sensitive areas - identification (Article 5)

- It is for Member States to identify sensitive areas
- Criteria (Annex II)
 - waters, found to be eutrophic or may become eutrophic in near future if protective action is not taken
 - surface freshwaters intended for abstraction of drinking water which could contain more nitrate than allowed by Drinking water directive
 - where further treatment is necessary to fulfil Council Directives
- Regular reviews and modifications
- Member States do not have to identify sensitive areas if they implement tertiary treatment over all their territory
- Some 75% of EU territory



Seemingly, identification of sensitive areas is another wide area of discretion for MSs – however, they are bound by criteria in Annex II – asserted multiple times by the CJEU

Repeat definition of eutrophication from the slide 6

What if waters do not meet *other* criteria by the Drinking Water Directive? – This situation is covered by the following criterion, stipulating treatment necessary to meet standards prescribed by ANY other Directive

Identification should be reviewed in no more than 4 years and identification consequently adjusted

If „more stringent treatment“ applied in all the territory, this is equivalent of identifying the whole territory as sensitive area

The high percentage of the EU territory treated as sensitive areas is partly a consequence of high environmental standards and partly of river basin approach introduced by the Water Framework Directive

Sensitive areas - identification (Article 5)

- CJEU C-280/02 (Commission v. France): criteria for eutrophication, based on definition in Article 2:
 - enrichment of water by nutrients, especially compounds of nitrogen and phosphorus
 - accelerated growth of algae and higher forms of plant life
 - undesirable disturbance to the balance of organisms present in the water
 - undesirable disturbance to the quality of the water concerned
- Relationship of cause and effect (nutrients → growth → disturbance)
- Disturbance may include „nuisances with respect to aesthetics, odour, use of small craft, clogging of filters...”



As mentioned before, MSs have only a virtual area of discretion – in reality, the Commission will enforce failure to identify sensitive areas according to Annex II

In this case, the Commission claimed that France failed to identify a number of sensitive areas hit by eutrophication

The decision emphasized the meaning and the role of scientific studies

The CJEU elaborated the criteria for eutrophication – closely following the Directive (actually very little added or explained in depth) – however the way of reasoning is shown, including the causal relationship

As mentioned before: it defined „environment“ and „nuisances“ widely

Sensitive areas - requirements for processing

- Urban waste water discharges into sensitive areas from agglomerations of more than 10.000 p.e. shall be subject to processing more stringent than secondary
- Standards for treatment: Annex I
- Exception: if reduction of $\geq 75\%$ for total phosphorus and total nitrogen can be shown
 - CJEU C-452/05 (Commission v. Luxemburg): a Member State must be able to prove the reduction
- Includes discharges from treatment plants situated in relevant catchment areas of sensitive areas contributing to pollution of those areas



Again, the threshold of 10K p. e. as seen before

„More stringent than secondary“ – further reduction of nutrients

The standards for treatment outlined in Annex I are based on definitions of total concentration of phosphorus/nitrogen and/or percentage of reduction of the same, one or both, depending on local situation

The exception allows performance of *individual* processing plants to be lower than stipulated if *all* waters entering all treatment plants in the area meet the standard of 75% reduction, which is actually very similar to the previously mentioned criteria set in Annex I

Catchment area – geographic area from which waters flow into relevant sensitive area – influence of the Water Framework Directive, which introduced (subsequently) the concept of the river basin management

There has to be a causal link („contribution“) between the location of a treatment plant in a catchment area and the pollution of a sensitive area.

Sensitive areas - requirements for processing

- CJEU C-396/00 (Commission v. Italy): Objective of the Directive would be undermined if only waste water which discharges directly into sensitive area had to be subjected to more stringent processing
- CJEU C-335/07 (Commission v. Finland):
 - The local situation determines whether nitrogen or phosphorus or both must be reduced
 - There must be a causal link between (indirect) discharges and the pollution of the sensitive areas
 - No provision of the Directive precludes regarding natural retention of nitrogen as a method for removing nitrogen from urban waste water



Shortly describe facts of the case: urban waste water from the city of Milan discharged without proper processing into two minor rivers, flowing into river Po. This river represents a sensitive area, but only in its delta and lower flow, some 300 Km from Milan. Italy argued that the relevant waste water was not discharged into the sensitive area.

In the second case, Finland argued that

- There is no need for reduction of one of the nutrients (phosphorus/nitrogen), as the other is the limiting factor
- There is no causal link between indirect discharges and pollution of the sensitive areas in question
- Significant natural retention of nitrogen occurs in its rivers and lakes

The decision means (among other) that a MS may rely on natural ability of waters to retain/remove nitrogen

Remarkably, this (and a very similar case involving Sweden) are the only important cases regarding the UWWT Directive, won by the MSs.

Less sensitive areas (Article 6)

- Member States *may* identify less sensitive areas
- Criteria in Annex II (*inter alia*):
 - Marine water body, where waste water discharge does not adversely affect the environment due to specific circumstances
 - Taking into account risk of negative influence to adjacent areas
- Agglomerations of 10.000 to 150.000 p.e. → coastal waters and 2.000 to 10.000 p.e. → estuaries
- Further conditions:
 - At least primary treatment
 - Comprehensive studies indicate that such discharges will not adversely affect the environment
- Review by the Commission
- Regular reviews and modifications



NOTE: this feature should be only mentioned briefly in order to keep timing

Exclusively, marine water bodies, including estuaries, may form less sensitive areas

Specific circumstances: open bays, intensive exchange of water, no eutrophication

Very important: must not adversely affect neighbouring areas

Minimum requirement: primary treatment

MSs should provide the Commission with all relevant information, if the Commission considers that conditions have not been met, submit appropriate proposal to the Council

Review after no more than 4 years, if no longer identified as less sensitive area, should meet general requirements within 7 years

Small agglomerations (Article 7)

- For discharges of urban waste water, entering collecting systems
 - From agglomerations of less than 2.000 p.e., into fresh-water
 - From agglomerations of less than 10.000 p.e., into estuaries
- Treatment by any process and/or disposal system which after discharge allows the receiving waters to meet the relevant quality objectives and the relevant provisions of this and other Community Directives („appropriate treatment“)



NOTE: This feature is not very important for general understanding of the Directive and needs not be presented fully if timing is problematic

Term „small“ is used differently in other contexts (recent CJEU’s decision: for agglomerations 2K – 10K), but for lack of better term it is used for agglomerations < 2K here

In principle, previous provisions of the Directive lead to a conclusion that agglomerations < 2K are not subject to the Directive

However, even these agglomerations are not allowed to negatively affect receiving waters

The wording by itself could be interpreted as relating only to those agglomerations with collecting systems

Process or disposal system – there may not be any processing at all, but in this case quality objectives will be difficult to meet (remind of BOD for untreated sewage – slide 7)

Discharges from agglomerations < 10K p. e. into estuaries seem to refer to transitional period, as otherwise secondary treatment is required – slide 14

Cross-border pollution (Article 9)

- Notification of the other Member State and the Commission of the relevant facts
- Organisation of „concertation, necessary to identify the discharges in question and the measures to be taken at source...”



NOTE: only present shortly in order to keep timing

Where waters within the area of jurisdiction of a Member State are adversely affected by discharges of urban waste water from another Member State, the Member State which waters are affected may notify the other Member State and the Commission of the relevant facts.

The Member States concerned shall organize, where appropriate with the Commission, the concertation necessary to identify the discharges in question and the measures to be taken at source to protect the waters that are affected in order to ensure conformity with the provisions of this Directive.

Performance of processing plants (Article 10)

- Must be sufficient under all normal local climatic conditions
- Seasonal variations of the load must be taken into account
- CJEU C-416/02 (Commission v. Spain): Seasonal influx of tourists must be taken into account
- CJEU C301/10 (Commission v. UK):
 - Frequency and intensity of overloads
 - Concept of best technical knowledge not entailing excessive costs (Art. 3/Annex 1) extends to the whole Directive



Directive: processing plants must be „constructed, operated and maintained“ in a way to ensure sufficient performance

Concept of normal climatic conditions: to be expected relatively regularly, extreme weather is excluded

Seasonal variations can have different sources, most frequently tourism – therefore, a processing plant located in an area seasonally frequented by tourists, must have sufficient capacity to process, even loads which occur in peak seasons.

Consequently (CJEU): if overloads occur frequently and do not exceed certain intensity, they must be considered „normal“

Concept of best technical knowledge originally applies only to construction of collecting systems – however, interpretation by the CJEU extended this concept to processing plants

Prior regulation / Specific authorisation (Articles 11 and 12)

- Subject to prior regulation and/or specific authorisation:
 - All discharge of industrial waters into collecting systems and urban waste water treatment (Article 11)
 - health of staff
 - functionality of collecting system and treatment plant
 - meeting of environmental standards
 - proper treatment and disposal of sludge (Annex I C)
 - Disposal of waste water from urban waste water plants (Article 12)
 - enable monitoring
 - meet certain quantitative criteria (tables in Annex I)
 - receiving waters must satisfy more stringent criteria laid down by other Directives
 - Points of discharge (Annex I B)



Again, actual regulation is in discretion of MSs, but must satisfy criteria set out in Annex I

Industrial waters: common denominator of the regulation (pre-treatment) is not to endanger staff or interfere with operation of collecting system and processing plant

- Not meaning that it does not have to meet other standards, but those standards are set out in other legal instruments (like IED)

Disposal of waste water must meet standards which ensure efficient operation of the system and assure appropriate quality of receiving waters

Important: not only quantitative criteria set by this Directive, but also qualitative criteria set by other Directives

Points of discharge: chosen as much as possible in such a way as to minimize the effects on receiving waters

Biodegradable industrial waste water (Article 13)

- Industrial sectors related to food processing (listed in Annex III)
- All discharges from plants representing load of 4.000 p.e. or more
- If they do not enter urban waste water treatment plants
- Member states shall set requirements appropriate to the nature of the industry
- Review by the Commission



Examples: milk processing, manufacture of fruit and vegetable products, manufacture and bottling of soft drinks, potato processing, meat industry...

Common denominator: food processing industry – similarity of its waste waters to domestic waste waters, also in consequences for the receiving waters (nutrients, predominantly nitrogen and phosphorus)

These waste waters may enter urban waste water treatment plants, then there are no special requirements (except Article 10)

Again, MSs have a field of discretion, but the Directive provides review by the Commission (carry out a comparison between MSs and if necessary make appropriate proposal)

Disposal of sludge (Article 14)

- Sludge: residual sludge, treated or untreated, from urban waste water treatment plants (Article 2)
- Valuable asset or toxic/persistent waste?
- Shall be re-used where appropriate, disposal routes shall minimize adverse effects on the environment
- Disposal of sludge subject to general rules or registration or authorization
- Disposal of sludge to surface waters phased out



Remind audience of suspended solids which are settled during the processing (mostly primary – slide 8)

Usually this is a foul stinking mud in vast quantities and can adversely influence environments in the same ways as other waste. May contain harmful substances as heavy metals, pesticides etc.

BUT

Can be used as fertilizer, addition to soil, landfill

In this case, there are no additional standards, but only „general rules or registration or authorisation“, set by MSs.

This provision only sets general principles which can hardly be enforced („where appropriate“, „minimize adverse effects“)

Disposal of sludge to surface waters was common mostly in the UK and relatively rare in other MSs.

Monitoring (Article 15)

- Obligation to ensure monitoring of
 - discharges from urban waste water plants
 - direct discharges of biodegradable industrial waste water (Article 13)
- In cases of less sensitive areas and disposal of sludge to surface water, monitoring and studies to verify that environment is not adversely affected
- Frequency of sampling
- Guidelines by the Commission



Mention that apart from the general obligation (first two bullets) this is a very technical provision. Detailed provisions on frequency of sampling and parameters which have to be monitored constitute a highly complex system, which can (and in some cases even actually was) enforced by the Commission.

Reporting (Articles 16 and 17)

- Every 2 years, Member States
 - Publication of reports on disposal of urban waste water and sludge
 - Transmission of reports to the Commission as soon as published
- Every 2 years, the Commission
 - Report, based on review and assessment of information on national programmes for implementation and their assessment



Again, a clear and technical provision which is important enough to be mentioned, but hardly needs any further explanation or comments

Implementation - deadlines, instruments and obstacles

- Deadline for transposition: 30 June 1993
- Last deadlines for implementation:
 - 31 December 2005 (EU-15)
 - Various dates until 31 December 2015 for EU-13 (except Croatia 2018/2020/2023)
- Mostly transposed through by-laws
- Main problem: complexity and cost of planning and implementing infrastructure
- Commission's threshold for infringement proceedings (C-395/13, Commission v. Belgium): collection rate < 98%, or if remaining 2% > 2.000 p.e.



The deadline for transposition is now far in the past and the deadline for implementation was 12 years ago for the EU15 and almost 2 years ago for EU13 (though there were different deadlines for individual MSs). However, the implementation is still lacking, as it will be illustrated later.

Transposition does not seem to present any major problems; the Directive is detailed and technical enough that it can be used a little bit more than just being translated and used as a national legal instrument (as, for example, in most German federal units).

Implementation, however, is a problem of wholly another magnitude, as it involves planning and building extensive infrastructure. Adding to the complexity of the problem it is extensive and sometimes less than systematic development of agglomerations in large parts of Europe without proper accompanying infrastructure.

In the above-mentioned cases, the Commission outlined its criteria for enforcement of implementation, closely following the basic rules, principles and thresholds set by the Directive.

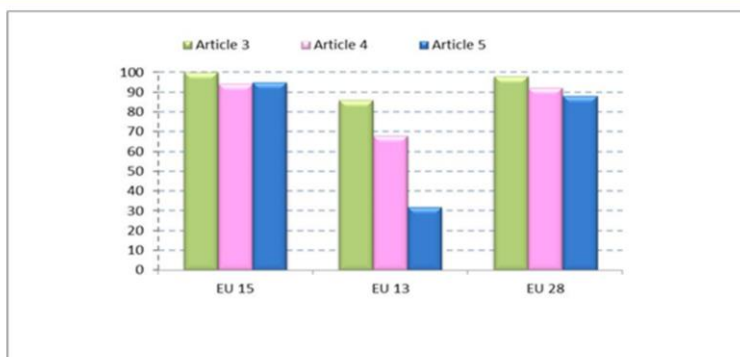
Implementation - reports

- 8th implementation report by Commission (Article 17) published in 2016, situation in 2012
- Compliance rates of EU-15 very high (many 95 - 100%)
- Compliance rates of EU-13 much lower, but
 - growing
 - low contribution to pollution load (14%)... therefore overall compliance still very high
- Importance of EU funding (17,8 billion EUR in 2007 - 2013)
- Water industry sector is an important contributor to economic growth and job creation



Unlikely to be of practical use for a national judge, but a welcome illustration of the state of affairs. In order to keep timing, shortly present the facts from the slide and illustrate with the following slide without much further comment.

Implementation - compliance



Compliance results at EU-28, EU-15 and EU-13 level regarding Articles 3 (collection), 4 (secondary treatment) and 5 (more stringent treatment).



GREEN = collection

PURPLE = secondary treatment

BLUE = more stringent treatment

CJEU practice - short overview

- Large number of cases, but mostly reflecting actual - not legal - difficulties in transposition and fulfilment
- First group (relatively small, low single digit): failure to ensure transposition, mostly due to competence of federal units
- Second group (around 20 cases): failure to ensure adequate level of treatment, including imposition of fines
- Single cases:
 - failure to fulfil reporting obligations
 - reference for preliminary ruling



NOTE: present if there is any time left or if there are only few comments/questions, as the most important cases were presented together with the relevant features of the Directive. Perhaps the most important message of this data is that the Directive itself is relatively unlikely to be referred to in national court cases, as most CJEU cases involved MSs and the Commission; there is but a single case, typical of national court procedure, namely reference for a preliminary ruling.

Another interesting feature of these cases is the proportion of the Commission's success and (legally) relatively simple arguments. In response, also reasoning of the CJEU is in many cases merely reaffirmation of the Directive's provisions (as illustrated on slide 17 on example of definition of eutrophication) rather than in-depth interpretations.