Urban Waste Water Treatment Directive implementation in the Member States

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http://europa.eu.int/comm/environment/water
1. Basic principles of the Directive
2. Facts and figures on EU-25
3. Implementation EU-15
4. Lessons learned
5. Status inventory EU-10 – Planning & inventory
6. Challenges EU-10
7. New approach and next steps for UWWTD
8. Questions?
1. Basic principles of the Directive
Objectives

- The Directive concerns collection, treatment and discharge of urban waste water and treatment & discharge of waste water from certain industrial sectors.

- Objectives: to protect the environment from the adverse effects of urban waste water discharges & discharges from waste water from certain industrial (food-processing) sectors.

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Object of studies – agglomeration > 2000 p.e.

« Agglomeration means sufficiently concentrated area where the population and/or economic activities are sufficiently concentrated for urban waste water to be collected and conducted to an urban waste water treatment plant or to the final discharge point.»

1 p.e. = organic pollution generated by one person per day.
The object of UWWTD

Pre-TR

Art.11

Agro-food
>4,000 p.e.

Art.3

Food-processing WWTP

Art.13

UWWTP

Art.4/5/7

Receiving areas:
- sensitive area
- catchment of sensitive area
- normal area
- less sensitive area
Main principles

- Chain is linked up through stable identifiers (IDs) & co-ordinates

Agglom. ⇒ Collect.syst. ⇒ UWWTP ⇒ Discharge point ⇒ Receiv.area\textsuperscript{RWB}

- Size of agglomeration

\textbf{defines \underline{treatment level}} requirements

- Receiving area type

- Inventory + mapping of designated sensitive areas – \textbf{first !} before going to agglomeration inventory and planning of implementation steps
Management principles

1. **Planning** (Implement programmes; designation of areas inventory of agglomerations)
2. **Regulation** (requirements of the directive)
3. **Monitoring** (to monitor progress of implementation: discharges and receiving waters)
4. **Information and reporting**
   - aggl.size → collect. system → treatment → discharge point → receiving areas;
   - EC reports; link-up with WFD

EU-15 – four cycles
EU-10 – the first cycle started in 01/05/2004
2. Facts and figures on EU-25
~ 75 % of EU population lives in cities and towns

**EU-25:**

⇒ ~ 28,000 agglomerations > 2,000 p.e.; generated load ~ 600 M p.e.

⇒ ~ 650 agglomerations > 150,000 p.e.; generated load ~ 280 M p.e.

**EU-10:**

⇒ ~ 4,000 agglomerations > 2,000 p.e.; generated load ~ 82M p.e.

⇒ ~ 88 agglomerations > 150,000 p.e.; load ~ 37 M p.e.
Deadlines and transitional periods

European Commission, DG Environment

31/12/1991

31/12/1998

31/12/1993

31/12/2000

31/12/2005

31/12/2015

2002

2004

2006

2008

2010

2012

2014

2016

CY

Cz

EE

HU

LV

LT

MT

PL

SK

SL

Art. 3,4,5, (7,13)
## Transitional periods for EU-10

**European Commission, DG Environment**

<table>
<thead>
<tr>
<th>MS</th>
<th>Interim target dates to comply</th>
<th>Final deadline of transitional period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cz</td>
<td>01 May 2004</td>
<td>31 Dec 2010</td>
</tr>
<tr>
<td>EE</td>
<td>31 December 2009 - &gt;10.000 p.e.</td>
<td>31 Dec 2010</td>
</tr>
<tr>
<td>LV</td>
<td>31 Dec 2008 – &gt; 100.000 p.e. 31 Dec 2011 – &gt; 10.000 p.e.</td>
<td>31 Dec 2015</td>
</tr>
<tr>
<td>LT</td>
<td>31 Dec 2007 – for &gt; 10.000 p.e.</td>
<td>31 Dec 2009</td>
</tr>
</tbody>
</table>
3. Implementation EU-15
Implementation EU-15 - Status as at 1/01/2003 for EU-15 (4th reporting exercise)

- 470.9 Mp.e.
- ~8200 large agglomerations
- 80 Mp.e.
Implementation EU-15

- ~ 8200 large agglomerations
- NA: ~ 2700 large agglomerations
- SA: ~ 5500 agglomerations and UWWTPs
- EU-15
Implementation EU-15

- ~ 8200 large agglomerations
- SA: ~ 5500 agglomerations and UWWTPs
- Compliance: 51% load or ~ 5600 agglom. & UWWTPs
- NA: ~ 2700 large agglomerations
- Not complying and/or not reported: ~ 2600 large agglomerations
- 470.9 M p.e.
- 209.2 M p.e.
- 261.7 M p.e.
- 230.6 M p.e.
- 240.3 M p.e.
Sensitive areas: eutrophication and potential eutrophication
4. Lessons learned
Lessons learned (1)

- More reactive rather than proactive approach
  - However, some attempts on proactive approach - expert group in 1999-2000 on reporting

- No common implementation strategy

- Ad-hoc questionnaires based on deadlines 1998 & 2000

- Lack of precise inventory at EU-15 before starting reporting exercise
Lessons learned (2)

Commission’s experiences with the Member States in reporting exercise:
- Delays to report information
- Unstructured replies
- Information is inconsistent, incomplete, bad quality

Towards proactive approach:
- Working group on reporting => 8 meetings since 2004
- Seminars/workshops in selected EU-15 & EU-10
5. Status inventory EU-10 – Planning & inventory
Eutrophication of European Seas

Concentrations of chlorophyll-a

European Environment Agency

Brussels 7 November 2006

Violeta Vinceviciene, DG ENV D.2

Note: The concentration scale is valid only for oceanic waters and overestimates to a large and variable degree the chlorophyll concentrations in coastal seas.
## Inventory of sensitive areas: EU-25

<table>
<thead>
<tr>
<th></th>
<th>EU-15</th>
<th>EU-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entire territory as SA</td>
<td>Belgium, Denmark, Finland, Sweden, The Netherlands, Austria, Luxemburg</td>
<td>Estonia, Latvia, Lithuania, Poland, Czech Republic, Slovakia</td>
</tr>
<tr>
<td>(or applies Art. 5(8))</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(13+1=14 of 25)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Almost entire territory as SA</td>
<td>Germany</td>
<td>-</td>
</tr>
<tr>
<td>Parts of territory as SA</td>
<td>France, Greece, Ireland, Italy, Portugal, Spain, UK</td>
<td>Hungary, Slovenia, Cyprus</td>
</tr>
<tr>
<td>(10 of 25)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All territory normal area</td>
<td>All territory normal area</td>
<td>Malta</td>
</tr>
<tr>
<td>(1 of 25)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
- **Total generated load** = 84,68 M p.e.
- **Total number of agglomerations** = 3342

Total generated load in M p.e.

No. of agglomerations
Inventory for EU-10

- Total
  - generated load = 84,68 M p.e.
  - number of agglomerations = 3342
  - Load 45%
  - Number 3%
  - Load 13%
  - Number 66%

- Large aggl. >150,000p.e.
  - Load 45%
  - Number 3%

- Small aggl. [2,000-10,000p.e.]
  - Load 13%
  - Number 66%
Preliminary self-assessment as reported by MS:

- EU-10: total load = 84.68 M p.e.
  - 79% of collecting systems in place
  - 23.7% of secondary treatment in place
  - 42% of more stringent treatment in place
6. Challenges EU-10
Challenges for EU-10

... using EU funds

- **2004-2006** (N+2 rule => 2008):
  - Only ~ 27% of CSF used already in total
  - Support to EU-10 ~ about 3,2 – 1,6% of GDP in all sectors

- Investment needs for EU-10 (UWWTD) as indicated by MSs (art.17 report)~ 21.5 B€**

![Pie chart showing investment needs: 5.8 B€ or 29% for collecting systems, 13.97 B€ or 71% for treatment plants and sludge treatment.]

For collecting systems, in €M
For treatment plants, and sludge treatment, in €M

** No data from MT and LV
Challenges for EU-10

Lack of

- management inside MS => gaps in
  - inventory & assessment of current status
  - planning & forecast to use of EU funds in an optimal way

- ‘critical mass’ inside MS to understand the main concepts of the Directive provisions & link to WFD-RBMP/PoM

- experts for drafting project proposals to CSF =>
  - Gaps in project proposals:
    - Description of inventory: initial status & problem identification
    - Project timetable in line with the transitional periods
    - Long process of adoption of Commission decision for funding
7. New/revised approach and next steps for UWWTD
A set of overlapping and interacting ‘worlds’
New/revised approach

- Systems’ approach for
  - UWWTD implementation and reporting since adoption of WFD:
    - River basin scale => integrated approach for water management
    - Linking implementation of WFD & UWWTD:
      - pressures and impacts
      - RBMPs (PoM = UWWTD implementation – minimum for WFD)
  - Reporting on all water issues within WISE:
    - multiple use of reported data, use of integrated analysis
  - Clear and stable link/chain within UWWTD:
    - agglomeration <=> receiving area / receiving water body/water quality
WISE in a wider context

Environmental Reporting/
EIONET/INSPIRE/SEIS

X-cutting issues such as e.g. Biodiversity and Health

Air  Soil  Water  Agriculture  Climate change  Others...

WISE

WFD, UWWTD, BWD, DWD, NiD

New policies: floods, marine strategy, etc.

Wider reporting: OECD/ESTAT, JQ-IW, HELCOM, OSPAR, etc.
New/revised approach

**Principles:**

- end-of-pipe and integrated approach:
  - co-ordination of implementation and reporting (compliance check) with other EU water policies & reporting activities
- report once – use many:
  - Synergies/coordination/co-operation with ESTAT, EEA, JRC in reporting on water and even wider international context
  - Integration of UWWTD reporting into WISE
Management of implementation:

- Be pro-active working with MSs rather than reactive
  - WG on reporting 2006-2008
    - New questionnaire-2007
    - UWWTD-WISE reporting
    - manual & glossary for reporting, clarification of concepts & definitions
  - Bilateral workshops PL, ES
- Committee and WG meetings, explanatory/guidance papers, bilateral meetings and workshops
Thank you very much for the attention

Questions?