

Workshop on the evaluation of water leakage levels: *European perspective and its evolution*

29 January 2025 - Bert Leemans



Recast Drinking Water Directive (DWD): some 'history'

- *Adoption by Council and European Parliament – 16 December 2020*
- *Publication in the Official Journal (OJ)*
<http://data.europa.eu/eli/dir/2020/2184/oj> – *23 December 2020*
- *Entry into force 20 days after publication in OJ – 12 January 2021*
- *Member States had 2 years to transpose into national law and to comply with provisions after date of entry into force – **12 January 2023***

Recast DWD – Objectives

- *To **protect human health** by ensuring the quality of water intended for human consumption.*
- *To **improve access to water** intended for human consumption*



Art. 4(3): recast DWD provisions on water leakage levels

3. In accordance with Directive 2000/60/EC, Member States shall ensure that an assessment of water leakage levels within their territory and of the potential for improvements in water leakage reduction is performed using the infrastructural leakage index (ILI) rating method or another appropriate method. That assessment shall take into account relevant public health, environmental, technical and economic aspects and cover at least water suppliers supplying at least 10 000 m³ per day or serving at least 50 000 people.

The results of the assessment shall be communicated to the Commission by 12 January 2026.

By 12 January 2028, the Commission shall adopt a delegated act in accordance with Article 21 in order to supplement this Directive, by setting out a threshold, based on ILI or another appropriate method, above which Member States shall present an action plan. That delegated act shall be drafted using the Member States' assessments and the Union average leakage rate determined on the basis of those assessments.

Within two years of the adoption of the delegated act referred to in the third subparagraph, Member States having a leakage rate exceeding the threshold set out in the delegated act shall present an action plan to the Commission laying down a set of measures to be taken in order to reduce their leakage rate.

Art. 4(3): Member States' assessment provisions

- *Ensure an **assessment of***
 - ***water leakage levels** within their territory*
 - ***potential for improvements** in water leakage reduction*
- *Using the **ILI rating method or another appropriate method***
- *Take into account **relevant public health, environmental, technical and economic aspects***
- ***Cover at least the larger water suppliers** (supplying at least 10 000 m³/day or serving at least 50 000 people)*

Art. 4(3): Member States' assessment provisions

- *Member States' assessment results: **communicate to COM by 12 January 2026***
- *Member States having a leakage rate exceeding the threshold value set out in the DA shall present an **action plan** to the COM within 2 years after adoption of the DA (by January 2030) laying down a set of **measures to reduce their leakage rate**.*

Art. 4(3): Commission empowerments

- *By 12 January 2028, the COM shall adopt **Delegated Act by setting out a threshold, based on ILI or another appropriate method**, above which Member States shall present an action plan.*
- ***Delegated Act drafting:** using the Member States' assessments and the EU average leakage rate determined on the basis of those assessments.*

Art. 4(3): Potential implementation issues

- *Which assessment (rating) method will be used by Member States?*
 - *How will Member States assess the ‘potential for improvements’ and take into account human health, environmental, technical and economic aspects in their assessment?*
 - *What format will be used by Member States to communicate their assessment results to COM by Jan 2026?*
 - *How will COM determine a threshold based on a method using the Member States’ assessment results?*
- ➔ ***both Member States and COM have an interest to use a harmonised methodology for both the communication (by January 2026) and the subsequent COM assessment / setting a threshold value based on a method (by January 2028)***

Art. 4(3): discussions COM and Member States

- *Discussions were/are held in the COM **Drinking Water Expert Group** meetings (DWEG)*
- **Survey** (2024) held by DG ENV in the DWEG: Member States' preferred method(s) ?
- *Result survey: preferred method is based on **IWA Water Balance** and an **indicator proposed by EurEau**:*

$$\frac{\text{Non-Revenue Water (NRW)}}{\text{\# km mains}} \quad [m^3/(km.year)]$$

- *Need for further elaboration: on request of DWEG members the COM established a DWEG subgroup on water leakage levels (SG-WLL) in November 2024.*

Subgroup SG-WLL: tasks and objectives

- *To establish cooperation/coordination with Member States and stakeholders on questions relating to the implementation of the provisions related to water leakage of the DWD.*
- *To bring about an exchange of experience and good practice on the assessment of water leakage levels and potential for improvements to reduce water leakage levels among Member States.*
- *To determine comparable drinking water leakage level assessment methods before the date of 30 June 2025 which should, to the extent possible, allow a harmonised and consistent communication to the Commission of the results of the assessment of drinking water leakage levels within Member States' territory.*
- *To support DG Environment in the preparation of the delegated act that the Commission shall adopt by 12 January 2028 as provided for in paragraph 3 of Article 4 of the recast DWD.*

Subgroup SG-WLL: state of play

- *SG-WLL is co-chaired by **DG ENV (COM)** and **Portugal (ERSAR)***
- ***20 Member States** have nominated members + representative from Norway*
- *COM invited 3 experts (**EurEau, Aqua Publica Europa and WAREG**)*
- *First meeting SG-WLL: **January 2025***
- *Based on the discussions, **questionnaire sent out** to members & experts*
- *Next meeting SG-WLL: **March 2025***
- *Objective : to reach consensus by **June 2025 + reporting to the DWEG***

Subgroup SG-WLL: IWA Water Balance

| | | | | | |
|---------------------------|--|---|---|--------------------|-------------------------|
| System Input Volume (SIV) | Authorised consumption (including exported water) (ACON) | Billed authorised consumption (BAC) | Billed metered consumption (BMC) | Revenue Water (RW) | |
| | | | Billed unmetered consumption (BUC) | | |
| | | Unbilled authorised consumption (UAC) | Unbilled metered consumption (UMC) | | Non Revenue Water (NRW) |
| | | | Unbilled unmetered consumption (UUC) | | |
| | Water losses (WLOS) | Apparent losses (AL) | Customer metering inaccuracies (CMI) | | |
| | | | Unauthorised consumption (UC) | | |
| | | Real losses (CARL) | Leakage on transmission and distribution mains (LTD) | | |
| | | | Leakage and overflows at utility's storage tanks (reservoirs) (LOS) | | |
| | | Leakage on service connections up to the point of customer metering (water suppliers' responsibility) (LSC) | | | |

Thank you !

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