Mass Balance – Next Generation Analytics for Water Loss Management

Many water utilities are rolling out smart meters with intra-day reading intervals to better understand demand in their water network. The benefits include helping customers to use less water, being able to quickly identify customer-side leaks and improving the accuracy of network leakage estimations.

As the coverage of smart meter data increases, so too do the range of analyses that can be applied to make water loss analysis smarter. The general idea of the Mass Balance is to derive more representative consumption estimates at an intra-day level, leveraging the smart meter data as well as dynamic pressure adjustments.

The Mass Balance key aims are to:

- Maximise the use of all available smart data to enhance analysis and decision-making

- Improve confidence in Water Loss Analysis by estimating more accurately

- Gain a better understanding of consumption patterns and more easily identify potential issues such as inaccurate allowances or missing consumption.

This proposed presentation will cover the following:

1. Mass Balance Overview

2. Cohorts & Unit Profiles

3. Leakage & Residual

4. Review Process

5. Case Study Examples