A Compendium of Sensors and Monitors and their Use in the Global Water Industry

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Rationale

The management of water and wastewater networks to meet operational demands and regulatory compliance requires greater system knowledge and improved system control. The use of real-time monitoring and control enables the more flexible and efficient use of existing assets, the ability to respond pro-actively to changes, and savings in operational costs. However, the potential of modern monitoring technologies remains underexploited. One important reason is the lack of information on real-world performance, costs and experience available in the public domain.

Objective

The goal is to create a global, public directory (**the Compendium**) with unbiased information on commercially available sensor types, O&M requirements, best practices, best-in-class systems, deployment sites, and real-world knowledge and experiences which would allow end-users to find suitable instruments, to learn from the experiences of others and help them avoid common pitfalls.

The Project

On behalf of the Global Water Research Coalition (GWRC), the Water Environment Research Foundation (WERF) commissioned the project to compile a *Compendium on Sensors and Monitors and their Use in the Global Water Industry*.

Consortium

Data collection will be carried out by Benten Water Solutions (NL) and WRc plc (UK) in Europe; by Chris Swartz Utilisation Engineers (SA) in South Africa; by Tetra Tech (USA) in North America; by AECOM (AUS) in Australasia and Singapore.

Scope

The project will focus on:

> *"...commercially available online monitoring technologies for water quality in drinking water and wastewater"*

It will identify and document information on different aspects of sensor technology deployment supplied by the end-users themselves.


Scheme 1: Watercycle to be addressed

Approach

Information gathering will take place on several levels:
* surveys, literature reviews and expert interviews
* in-depth case-studies.

The case-studies will be carried out at exemplary utilities and will pay special attention to the (successful) implementation of sensor technologies, e.g. in a particularly innovative or integrated manner.
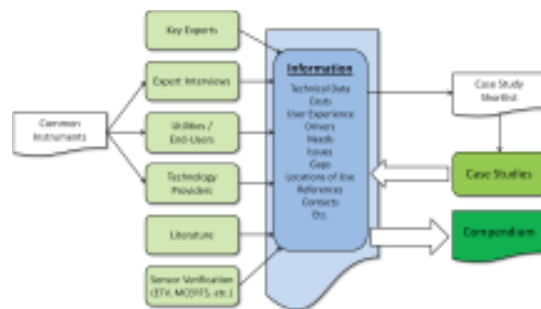
Scheme 2: data sources and connections

> We are seeking technical input on sensors and their use as well as candidates for case-studies.

For more information on sharing your experiences, please contact any of the authors listed above.

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