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Foreword

The first issue of **Fiware4Water** e-newsletter is for us the opportunity to embark you on the project's journey which aims at the end of the 3 years (2019-2022) to deliver a digital single market for smart water services. **Fiware4Water** is on its way to develop an additional component to the **FIWARE** Platform aiming at accelerating the development of smart solutions.

Fiware4Water has officially started in May 2019 and being launched at **Fiware4Water** first General Assembly held in Brussels on the 10 of June. One key objective of the first 6 months or so was to deliver the end-users, Demo Case and innovation requirements. The results are nowadays available on our [website](#).

Their analysis will be delivered very soon, focusing on a gap analysis that will bring out the final requirements. So **Fiware4Water** reference architecture, smart applications and devices development can start in the closest possible way with the 4 Demo Cases. The articles that have been prepared for this newsletter aim at giving you the general picture of the project, explain the link between **FIWARE** and **Fiware4Water** as well as bring an update on the latest activities. We invite you to visit our [website](#) and follow us on LinkedIn and Twitter to get more details. We hope you will enjoy your reading and we will be pleased to answer any of your [Fiware4Water questioning](#).



*Gilles Neveu
Director of innovation
at Office International de l'Eau*

**Gilles Neveu, project coordinator
on behalf of Fiware4Water consortium**

Fiware4Water consortium



Fiware4Water in a nutshell

Objective

Link the water sector to FIWARE by demonstrating its **capabilities** and the specific potential of its **interoperable and standardised** interfaces for both water sector end-users (cities, water utilities, water authorities, citizens and consumers) and solutions providers (private utilities, SMEs, developers), seen as an innovation ecosystem, by building and demonstrating a series of **complementary and exemplary paradigms**, and by promoting an EU and global wide **network of users**. It will create the *Fiware4Water ecosystem*, demonstrating its **technical, social and business** innovative potential.

3 years
2019-2022

14 partners
experts in ITC, water and social sciences, coordinated by OIEau

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4 Demo Cases

Athens Water Supply and Sewerage (GR)
Cannes Water Distribution System (FR)
Amsterdam Wastewater Treatment (NL)
Smart metering (UK)

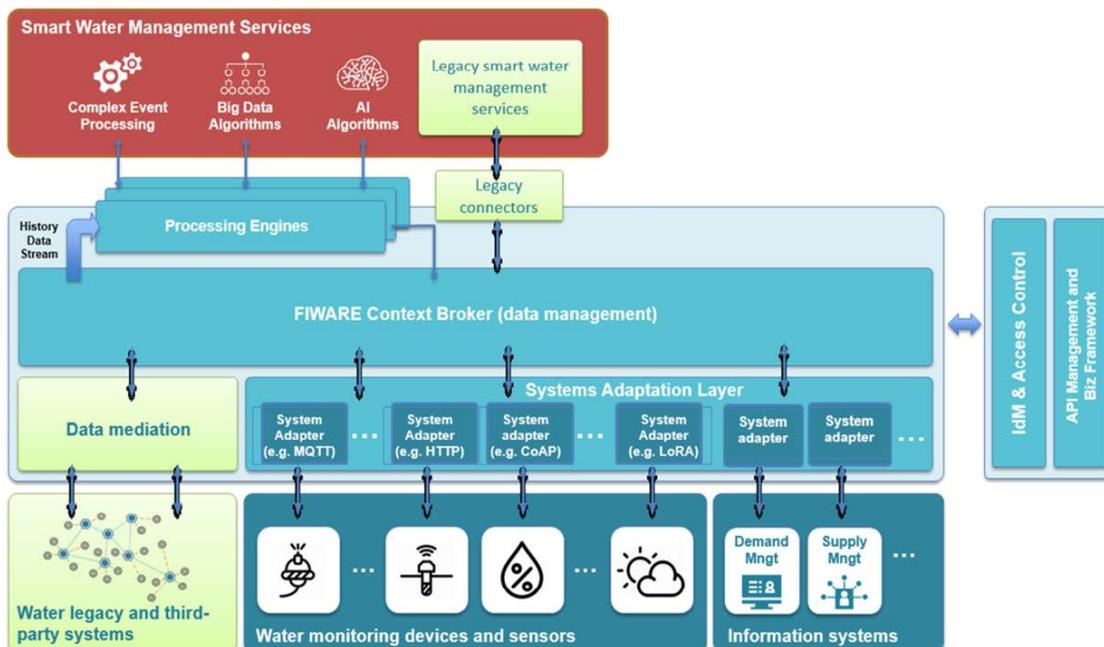
3 Demo Networks

Municipal Governments
Policymakers and managers
SMEs and innovators

Why Fiware4Water?

The prerequisite of **Fiware4Water** is to lever the barriers of the water digital sector that is facing a low level of maturity in the integration and standardization of ICT solutions, in the business processes of these solutions and relative implementation of legislative framework, as described by the **ICT4Water cluster**.

[Read more...](#)



Which links between FIWARE and Fiware4Water?



FIWARE is a curated framework of open source components which can be assembled together and with other third-party components to accelerate [the development of Smart Solutions](#).

From the FIWARE architecture, at least five major benefits for the water domain will be developed by **Fiware4Water**: bringing water into cross domain applications; using standardised interfaces, models and methods also for interoperability; revealing the power of data; integrating seamlessly legacy system; boosting innovation in the water domain.

[Read more...](#)

Fiware4Water objectives and concept

To tackle the barriers and related needs of the water digital sector, **Fiware4Water** aims at creating the **Fiware4Water** ecosystem and prove its innovative technological, social and business potential by linking the water sector to **FIWARE** (the open and license free smart solutions platform).

[Read more...](#)



Overview of Fiware4Water Demo Cases

The **Fiware4Water** project is based on **4 demo cases** dealing with specific aspects of digital water. The Greek demo case explores the raw water supply optimisation, the French Demo Case deals with the water distribution system management, the Dutch Demo Case is about intelligent control for wastewater and finally and the English Demo Case focusses on smart metering and citizen engagement.

[Read more...](#)

A word from South West Water in charge of the Smart Meters and Customers Demo Case (UK)

"Our demo case is well underway; the IoT communications network is installed, residents and business owners are on board, smart meters are in the ground and the data is being analysed. I'm pleased to say that we are already more proactively identifying and fixing leaks that our customers weren't aware of [...].

All of the above has been achieved the old fashioned way [...]. The next step is where FIWARE comes in. Our aim is to digitise this process within FIWARE to prove that the above (and more) can be achieved digitally. If we are successful, then we are confident we can make this a viable business as usual process for our wider customer base [...]."

Ben Ward, South West Water

[Read more...](#)



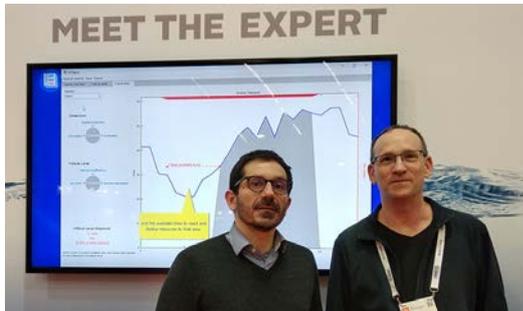
*Ben Ward, South West Water
Installation of smart meters in Great
Torrington (UK), July 2019*

Feedback on the collaboration with EPANet

"Digital transformation is all about connecting the physical world to digital solutions. As a water engineer and a consultant for water utilities and start-up companies, I often see, on one hand, the huge amount of data being collected by the water utilities, and on the other hand, the difficulties connecting it to available smart digital solutions. When I was asked to serve on the [External Advisory Board](#) of the **Fiware4Water** H2020 research project, I saw the opportunity to help bridge this gap.

The project aims to utilize the **FIWARE** platform capabilities to allow water utilities and authorities to publish their data in a standardized way, and for solution providers to interact with the data via open API architecture. Two of my passions are water engineering and open source software. By contributing to the [open source EPANET](#) project I'm able to combine the two (EPANET is an industry-standard program for modelling the hydraulic and water quality behaviour of water distribution system pipe networks).

The Centre for Water Systems in the university of Exeter UK, which is one of the **Fiware4Water** project partners, developed a revised version of the program, EPANET-p, which extends its capabilities to include pressure driven demands. During the first project's general assembly, held on November 2019 in Amsterdam, we arranged for a side meeting to discuss ways for real-time water simulation using EPANET-p combined with the **FIWARE** platform. The technologies planned to be developed in the project will be demonstrated on real-world test cases with challenging objectives such as: forecast and manage water demands, reduce leakage, optimal operations of water and wastewater systems and enhance citizen engagement regarding their household demand.



Dr. Christos Makropoulos (left) and Elad Salomons (right) at Aquatech Amsterdam 2019

All of these digital solutions heavily rely on different sensor data, provided via the **FIWARE** platform, and include flow, water quality, and pressure readings. I'm thankful for the opportunity to have a role within the project and hope it will benefit from my experience."

Elad Salomons, EPANet

Want to learn more? Look at the first series of Fiware4Water webinars

Fiware4Water participated to the organisation of a series of webinars to raise awareness on **FIWARE**, Water Data models & **EPANET**. All the sessions were successful with a participation between 35 to 53 persons. The three webinars are available on line.

[Read more...](#)

Save the dates

7-11th September 2020

Join FIWARE Foundation at the IFAT World's Leading Trade Fair for Water, Sewage, Waste, and Raw Materials Management! FIWARE Foundation will be running shows in the Federal Association booth of KOMMUNAL 4.0. We will be more than pleased to showcase together on stage expertise, technology trends and use cases around WATER.

28-29th September 2020

With the support of #F4W, an agreement has been reached with the #FIWARE foundation to host a Smart Water Technical Workshop during the forthcoming [FIWARE summit](#) in Malaga. The workshop will take place on the 28th afternoon. The discussions will focus on FIWARE based implementations (planned or on-going) for the water domain.

[Read more...](#)

Liaisons activities

Fiware4Water has been developed within an environment of existing initiatives. The project is part of the [ICT4Water cluster](#), a hub for EU-funded research and innovation projects on ICT applied to water management.

Fiware4Water has 3 sister projects that have been funded under the same call than **Fiware4Water** and started in 2019: [Scorewater](#), [Naiades](#) and [Digital Water City](#). The collaboration among the 3 projects and **Fiware4Water** has been initiated and will start with joint actions such events participations.

[Read more...](#)

How to get involved?

