



Second e-newsletter

March 2021

Foreword

F4W progressed well during this period, in spite of the pandemic, the lockdown, the travelling restrictions and all the upset that this “new reality” brought to us and the project. F4W was affected by the situation, but we managed to overcome several hurdles, as you can see from the progress at the Case Studies and the Demo Networks that follows. All our meetings turned into remote ones, but we still collaborated more closely than ever. We even managed to hold remote meetings with citizens in Case Study #4 (developing also a manual for this), which was an achievement in itself. The highlight of our activities during this period, however, can be summarised in the significant progress in deploying sensors and in developing data models for all the Case Studies and in Artificial Intelligence (AI) approaches for Case Study#3. Another highlight has been the launching and progress of the synergies with the other sister projects, forming the DW2020 (Digital Water 2020) group. Within this group we are joining forces to face challenges, we are supporting each other and we are boosting the performance and impact potential for all the sister projects.

We hope that in the next few months the situation will improve and that we'll again be able to travel, meet each other in person and also meet our participants in the Demo Networks and in Case Study 4 in person.



Lydia Vamvakeridou-Lyroudia (KWR)
scientific and technical coordinator

Fiware4Water consortium



Update from the 4 Demo Cases

Demo case #1: Water supply system real time operational management (Greece)

F4W partners are working on the modelling of their network and water data models. Some delays are due to the process of sensor purchase (public procurement). The base Fiware architecture has already been designed and is currently under development. The focus is now on integrating the legacy system for data exchange.

[Read more ...](#)

Demo case #2: Improving the Water Supply System: proactive management, leakage reduction and water quality monitoring (France)

Four NanoStations have been installed in the distribution network and the raw data are being collected in SUEZ Smart Solution's legacy system: AQUADVANCED software. SUEZ Smart Solution (3S) partner has proposed to organise a meeting to show how this software is functioning. Concerning the CNRS innovative probe (NanoSensor) which is under development, it will be tested remotely (due to the COVID-19 pandemic) on TZW bench (in Germany) for a 12-month test period. The base Fiware architecture has been designed and the current focus is on the smart models integration with the F4W platform and legacy systems. 3S is working on the development of the smart applications (intelligent data-driven models) in order to solve four business issues, and data will be shared soon with other F4W partners involved in this Demo Case (3S is validating legal restrictions before sharing data) so that they can also work and collaborate on this task.

[Read more ...](#)

Demo case #3: Intelligent control for wastewater treatment (The Netherlands)

The sensors are installed and data models aimed at water treatment plants are well advanced. The base FIWARE architecture has been defined and current efforts are devoted to integrating it with legacy systems. Regarding smart applications, [AI data-driven methodologies](#) (such as anomaly detection, soft sensors and optimal control) are being developed and implemented for smart management of the wastewater treatment plant. Also work on dashboards for visualization and data analysis of the newly installed sensors is started within the legacy system.

[Read more ...](#)

Demo case #4: Smart Meters and Customers (United Kingdom)

Partners continue working on their data models. The ConCensus protocol to engage with Great Torrington City and citizens is on-going virtually less easily than if it were organised in person. The first (remote) meeting with volunteer citizens was organised on 3 November 2020 and special material was developed for it. Important efforts have been devoted to integrating EPANET with the F4W platform. The base Fiware architecture is also designed and, currently, they are working on integrating the different components. The business

issues have been analysed and the development of the [smart applications](#) is ongoing.
[Read more ...](#)

Launch of the 3 DemoNetworks



Three DemoNetworks have started last September 2020. They aim at promoting an EU and global network of followers for digital water and FIWARE (cities, municipalities, water authorities, citizens, SMEs, developers).

DemoNetwork#1: Lower Danube, Middle and North Africa

One of the long-term objectives is to build up a community of pro-active followers, creating a platform for cooperation between Eastern European stakeholders at national and international level and help to implement IT solutions sector in water utilities while contributing to the reduction of potential technical gaps between them. The DemoNetwork#1 started with [A series of webinars](#) with the cities in Romania, Hungaria and Serbia to explain the potential of F4W activities for them in the future and to establish a social and political consensus on water digitization.

[Read more ...](#)

DemoNetwork#2: International Network of Basin Organisation

The main objective is to showcase the benefits of Fiware4Water smart applications and devices for managing water in an integrated way, relying on sound Water Information Systems and efficient data management. 6 workshops/webinars jointly organised with the events of INBO regional branches (Europe, Africa, Mediterranean, South America, North America, Central Asia) are planned. In addition, a concerted effort will be also undertaken to involve Municipal governments located within the INBO sphere of influence as follower. The first webinar took place in November 2020 to explain "How water digital innovations can benefit to River Basin Organisations? The on-going experience of Fiware4Water".

[Read more ...](#)

DemoNetwork#3: SMEs challenge

F4W challenges are currently being organised by FIWARE partners with the objective to boost SME innovation. It is a technical challenge, not really a hackathon although with the same spirit, since applicants will have 3 months to propose solutions. Challenges are proposed from F4W and DWC projects with dataset to be used by applicants with one condition: find a solution to address the challenge expressed by using the F4W platform. Organisation of the challenges will be explained to the Fiware ecosystems during a Wednesday webinar during the first trimester of 2021 before the official launch of the challenge.

[Read more ...](#)

DigitalWater2020 synergy group feedbacks



The 5 projects, F4W, aqua3S, DigitalWater.City, NAIADES and ScoreWater composing DW2020 have received funding from the European Union's Horizon 2020 Research and Innovation programme. They all address digital water related issues. DW2020 is organised into 4 thematic task forces focussing on FIWARE and ontology; Sensors and demonstration, Business model and Communication ([digitalwater2020-poster](#)). Since its creation in May 2020, the different task forces have virtually met many times to share and develop common approaches. For more information, you can contact Nicolas Caradot, from KWM in charge of the management of the DW2020 (nicolas.caradot[[@](#)]kompetenz-wasser.de).

Want to learn more?



F4W regularly organises webinars to raise awareness on digital water and more specifically to explain its innovative development.

At the end of 2019, a first series of three webinars was organised on FIWARE Ecosystem for water management, Data models for water management and The EPANET water network simulator ([first-series-f4w-webinars](#))

In September 2020, webinars were organised jointly with F4W and the support of DigitalWater2020:

- [Digitalising the Future of Water- FIWARE at Greencities](#)
- [FIWARE Water DAY - Digitalising the Future of Water](#)
- [Smart Water Management - Using FIWARE Smart Data Models for Water](#)

A public webinar was organised with the International Organisation Basins Organisation (DemoNetwork#2) early November 2020 to [present F4W and the engagement process with the water managers](#).

Private Webinars were organised to launch the process of the DemoNetwork#1 focusing on the eastern countries. This first series brought together the key institutional actors to path the way to the water local forum creation. The aim is to bring awareness on digital water solutions through F4W accomplishment. For more information contact: Ciprian Nanu (ciprian.nanu[[@](#)]bdgroup.ro)

Save the dates



As the DigitalWater2020 projects are progressing very well on their data models development, a specific webinar will be organised in the coming weeks with EASME and addressed to the #ICT4Water cluster community. More information will be regularly provided on our social media.

16-18 June 2021

F4W is participating to the SimHydro event in Nice (France) on the 16-18 June 2021, (<https://www.simhydro.org/>) with the DigitalWater2020 synergy group. The event focusses on “Model for complex and global water issues – Practices and expectations”. A special session will be organised for participants to explore F4W platform. More information will be regularly provided on our social media.

Fiware4Water?

How to get involved?



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