How water digital innovations can benefit to River Basin Organisations? The on-going experience of Fiware4Water

10 November 2020

Setting the scene



How Fiware4Water platform can support RBOs? Fernando López, FIWARE Foundation, e.V.



Fiware4Water objectives

- Build modular applications using FIWARE System of Systems and open API architecture for the real time management of water systems and ensuring the data interoperability.
- Demonstrate the value of data sharing and data exchange standardization across the whole value chain for improving decision making and operational management of water systems.
- Propose context aware cybersecurity mechanism compliant with critical infrastructure protection.
- Improve performance and interaction with the consumers, one of the main objectives of the EIP Water SIP¹.



Fiware4Water objectives

- Showcase the Fiware4Water solution and FIWARE compliant applications to demonstrate its potential as well as ease of integration with existing legacy systems.
- Demonstrate the socio-political value of FIWARE for Digital Water and the water sector and its capacity to support a full citizen engagement model (**ConCensus**²).
- Develop a community of adopters, around water compliant interfaces and data models that will
 demonstrate the usefulness and commercial value of FIWARE Solutions for the water sector.
- Contribute to the creation of EU wide environment for deployment of smart water systems, in a standardised licence or open source/free model as part of the movement towards the smart city of the future.



How RBOs can benefit from it?

- Fiware4Water will help the water industry to **become resource-efficient and smart** (better use of energy, avoid water losses and minimize the resources consumption).
- **Fiware4Water bridge the gap** between traditional water management, supply-side infrastructural projects and the future water management (focused on the demand-side).
- Fiware4Water Smart solutions will help to manage limited water supplies efficiently, balance rising demand with limited, and often variable, supplies.
- Digitalisation help communities become more water-wise by raising awareness and reduce water leakage with the consequent reduction in metered water and electricity bills.



How RBOs can benefit from it?

- Digitalisation can reduce water footprints and minimise environmental degradation as well as increase the water for a healthy environment.
- Digitalisation can reduce operational and management costs, energy use, and carbon emissions, specially from treating less water and wastewater.
- Fiware4Water supports the development of systems standards aligned with The Digital Water Action Plan from the European Commission³.
- Fiware4Water help to gravitate around **Context Data (Water facts)** which describes what is going on, where, when, why ...
- Fiware4Water avoids entry barriers or vendor lock-in through common smart data models and interoperable open standard interface (ETSI NGSI-LD⁴).





thank you



Fernando López, fernando.lopez@fiware.org



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 821036.