



# SMART WATER METERING AND USERS

## SMART WATER METERING IN A NUTSHELL

Smart water metering relies on technological research and development to improve water resource management by allowing to effectively and promptly address potential network issues that may affect the water users, such as leakages.

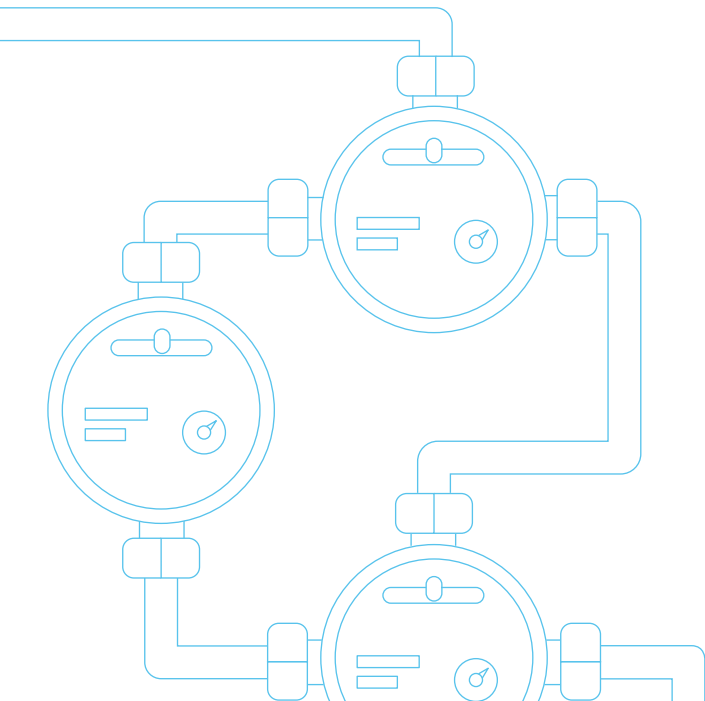
'Smart water meters', unlike regular water meters, are able to accurately measure, record and transmit water consumption in real time and therefore allow the improvement of water management, with consequent numerous advantages for water users and the environment.



## BENEFITS OF SMART WATER METERING

Smart water metering benefits both water users and the environment: increased accuracy allows to manage consumption, improve billing and information, and manage water resources more sustainably.

- 1. Accurate consumption monitoring** allows utilities to better inform the users on the quantity of water consumed in their household or business, to be able to reduce this usage. It can also decrease water wastage by setting alerts to detect leaks and allow fast response by signalling unusual consumption patterns that may be linked to issues in the network. All of these contribute to lower water usage or wastage level, which may, in turn, result in lower bills for users and more sustainable use of limited water resources.
- 2. Better information** implies more precise water bills whilst data on the water supply, consumption patterns, as well as efficiency and tariffs, supports transparency of water services, facilitates effective citizen participation and cooperation and fosters stronger water management governance.
- 3. Remote real-time data collection** means there is less need to access properties to read meters.
- 4. Stronger understanding of water demand by utilities** contributes to better planning and management of water supply, optimisation of existing infrastructure, prioritisation of new investments to replace ageing infrastructures, thus enabling public fund savings.



## SHOULD WE TRUST SMART WATER METERING?

The SMART.MET project takes users' and citizens' safety very seriously.

### Is there any risk for your health?

The SMART.MET project will use the best available technology to keep Electro Magnetic Field (EMF) emissions due to network devices below legislation limit values and as low as technically feasible.

Electromagnetic field (EMF) emissions are present everywhere in our environment, produced either naturally, such as by thunderstorms, or by human-made sources, such as electrical generation and transmission, domestic appliances, industrial equipment and mobile communications. Moreover, European Union legislation on EMF is established in the Radio and Telecommunications Terminal Equipment Directive (1999/5/EC) and the Low Voltage Directive (2006/95/EC).

### How is the security of the device ensured?

Access to devices and the data they collect will be strictly limited. Specific protocols and high security standards, such as encrypted transmission or anti-tampering countermeasures, will ensure the security of smart water metering devices and data transmission and prevent unauthorised access.

### Will personal data be protected?

High security standards will also ensure a full protection of users' data, regarding both personal and consumption data, in full compliance with the European Union's General Data Protection Regulation.

### How will water bills be affected?

Smart water metering provides more information to users and more accurate bills. Any potential error in the billing by the water supplier can be more easily detected and quickly resolved. In addition, the presumed reading of consumption and the consequent periodic adjustments may end.

## THE SMART.MET PROJECT

SMART.MET (PCP for Water Smart Metering) is a European project started in 2017 and led by a group of seven European public water utilities and six research and expertise entities. The aim of the SMART.MET project is to drive the development of new technologies to deal with the collection and management of smart metering data through a joint Pre-Commercial Procurement (PCP).

PCP is a competitive procedure for procuring research and development services. It involves different suppliers competing in parallel through several phases of development. The PCP procedure seeks to promote demand-driven research into new innovative smart water metering solutions that fully cater to the needs of water utilities, regarding for example readability, battery lifetime and interoperability.

SMART.MET follows the PCP principles for

1. cost-effectiveness of selected solutions;
2. openness, transparency, fair competition and
3. respect ethical considerations regarding suppliers, internal clients and stakeholders.

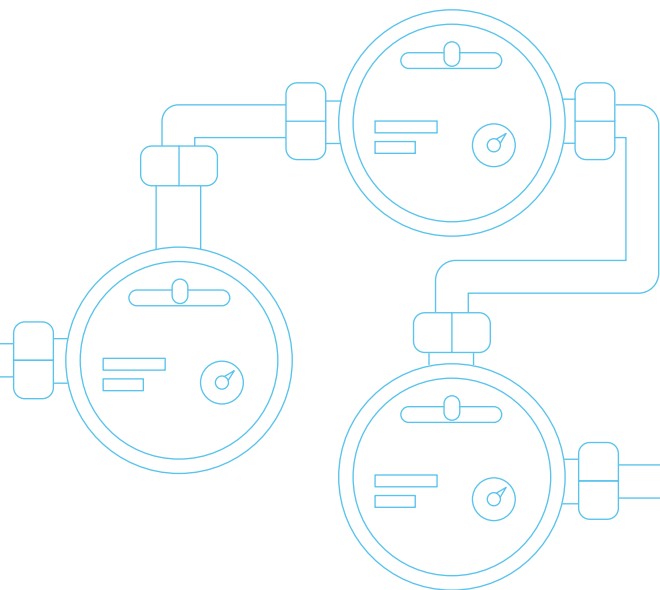
## WWW.SMART-MET.EU

 SmartMet\_PCP

 smart.met@oieau.fr



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 731996



## PARTNERS



**VIVERACQUA**  
GESTORI IDRICI DEL VENETO



**PROMEDIO**  
DIPUTACIÓN DE BADAJOZ

**eau de Paris**  
L'eau. Un service public

**BUDAPEST WATERWORKS**



**VIVAQUA**



**aragon partners**



**xlim**  
INSTITUT DE RECHERCHE