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smart_{met} 

The logo for 'smart_{met}' features the word 'smart' in grey, a blue water drop icon below the 'a', and 'met' in blue. To the right is a blue Wi-Fi signal icon.

Project abstract Phase II

HYDROKO nv

05-07-2019

Contactor Details	Type/ size of legal entity	Place of performance of contract activities	Logo
<p><u>Main contractor</u></p> <p>Hydroko nv</p> <p>Oudemansstraat 14; Kapelle-op-den-Bos</p>	SME	<p>% of contract value allocated to main contractor:</p> <p>86.7 %</p> <p>% of activities for the contract performed by the main contractor in EU Member States or countries associated with Horizon 2020:</p> <p>100 %</p>	
<p><u>Other consortium member(s) (if applicable)</u></p> <p><i>NONE</i></p>		<p>% of contract value allocated to contractor [-]:</p> <p>[] %</p> <p>% of activities for the contract performed by contractor [-] in EU Member States or countries associated with Horizon 2020:</p> <p>[] %</p>	
<p><u>Subcontractors (if applicable)</u></p> <p>Cmas-System Consultants, Ida <i>Lisbon Portugal</i></p>	SME	<p>% of contract value allocated to subcontractor [14,3%]:</p> <p>% of activities for the contract performed by subcontractor [-] in EU Member States or countries associated with Horizon 2020:</p> <p>100 %</p>	

Project abstract (+/- 1000 characters maximum)

Phase II: Develop, demonstrate and validate prototypes in lab conditions. A working prototype solution to submit a test bench in laboratory for verification against Phase 1 specifications and expected costs

Abstract: General concept

The developed prototype will be a combination and an integration of an standard available WM-BUS watermeter (battery powered) and a remote-controlled, battery powered smartvalve. Mechanically and configuration-wise both parts will be built together to one indivisible smart meter. The length of this prototype will match current meter standards for DN15 watermeters. (L=165 mm, connection= G3/4(R1/2). If necessary, later, the hardware design can be adapted to current DN20 standards. (L=190MM, connection G1B R3/4). Every watermeter with Wm-Bus capability can be integrated with the smartvalve. Of course, for the prototype one specific watermeter will be used. Again, if necessary, later an integration with other watermeters can be developed.

The valve is a membrane-type valve made in homogenous material (*TPE*) preventing deterioration of the material and thus long-life times. The valve mechanism itself will be non-wetted, preventing deposition on the mechanism and subsequent blocking of the valve

Development goal highlights are 16 year of battery life-time, hourly data-granularity, 1-day data latency and Plug & Play functionality. Special attention will go to n cybersecurity by means of “privacy by Design”, end-to-end encryption and authentication mechanisms.

Parallel an AMI-software platform will be developed. Main functionalities are managing installed smart-meter park and controlling the remote-controlled valve. The cloud-based AMI-platform will be built with Resilience and Security as main driving items

Previous EU funding

Is the project based on / a continuation of R&D activities that were previously funded by the EU?:

No

If yes, identify this EU funding: [-] — [-] — [-]