Conference on Innovation Procurement
17th-18th October 2017

DIEGO MACCHIELLA
Viveracqua, Italy

Development of new technologies based on "open technology platforms"

* The proposal for the Smart.met project was presented on 12/04/16 to a call Horizon 2020 / ICT-34call ICT-34-2016 - Pre-Commercial Procurement (PCP), with the aim of guiding the development of new technologies based on "open technology platforms" for water meters remote control

* Total cost of the Smart.Met project is about 4,44 Million Euro

* The EU contribution is about 3,99 Million Euro

smart.met

The Project

* Reminder: Pre-Commercial Procurement (PCP) is the **procurement of research and the development of new innovative solutions, before they become commercially available.**

* PCP involves different suppliers competing through different phases of development. The risks and benefits are shared between the procurers and the suppliers under market conditions.

* PCP focuses on the research and development (R&D) phase before commercialization.

smart,met

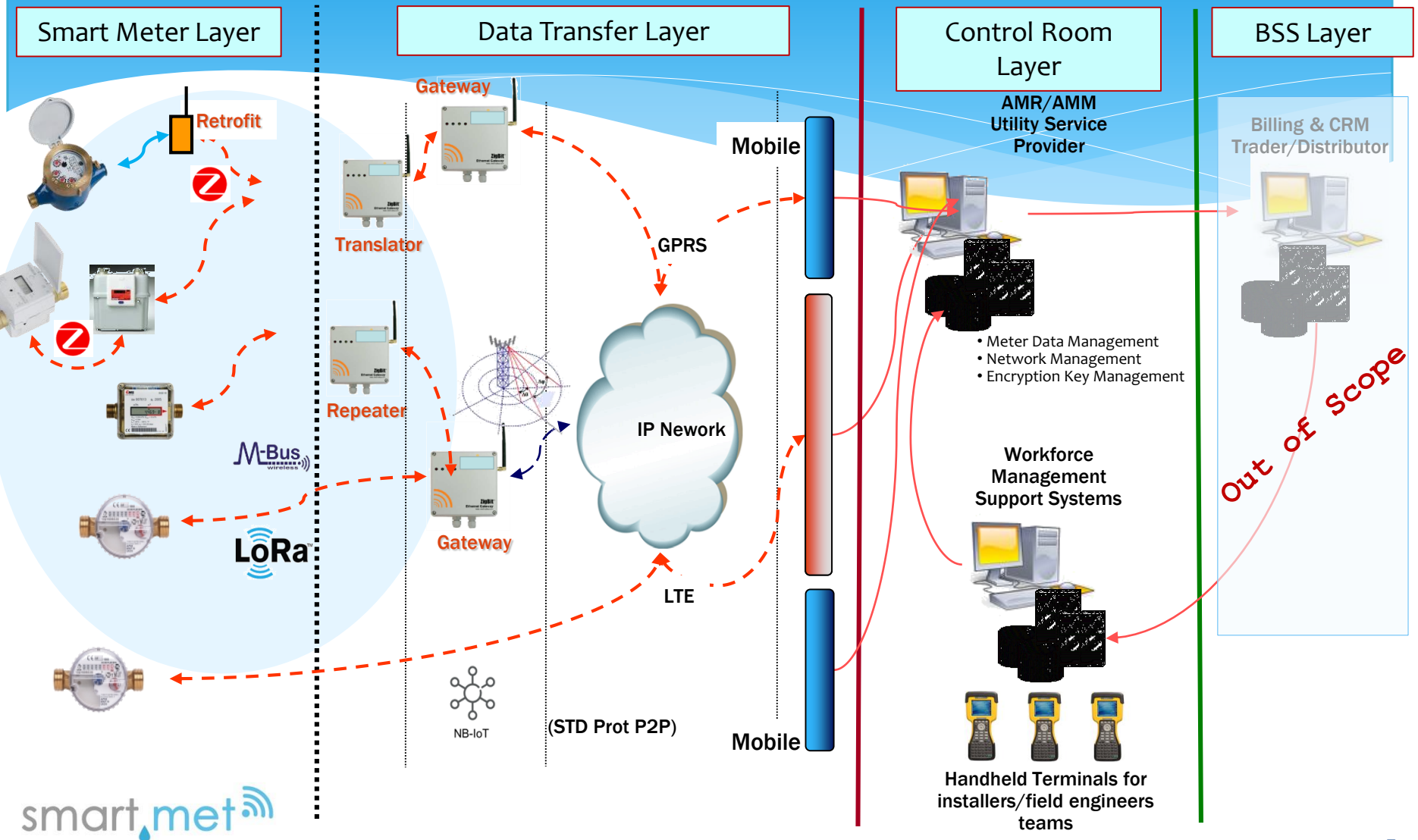
Objectives

- Drive the development of a new **cost effective, efficient, interoperable Water Smart Metering system based on open standards.**

- The innovation : a new generation of smart metering solution based on open standards for interoperability between different devices with bidirectional and on demand communication. Network devices, regardless of protocols used, will be operable by an open standard compatible network manager system

smart,met

SMART.Met general functional architecture



Expected benefits

- **Better detection of leaks/water losses** and possibility take immediate action
- **Better management of networks and water balance:** decreasing operating costs
- **More efficient management of the billing process**
- More efficient water use thanks to **increased awareness on water users' behaviour**
- **More sustainable meters:**
  - Longer battery lifetime
  - Easily recyclable (full life cycle thinking)
- **End of lock in situations**

smart,met

The Consortium

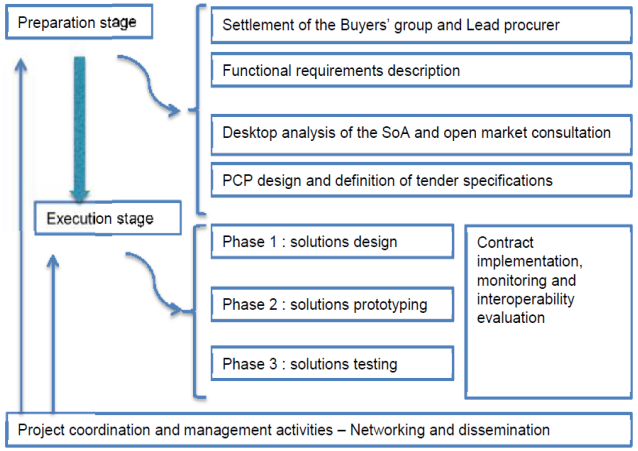
- Coordinator: the project is coordinated by OFFICE INTERNATIONAL DE L'EAU (OIEAU, France).
- Buyers group: the Lead Procurer will be Viveracqua, the public water utility supplying the Veneto Region in Italy, and the buyers' group will gather
  - Promedio : public utility supplying the province of Badajoz (Spain)
  - Eau de Paris : public utility supplying the city of Paris (France)
  - SDEA : public utility supplying the region of Alsace-Moselle (France)
  - CILE : public utility supplying the city of Liège and its surroundings (Belgium)
  - Budapest Waterworks : public utility supplying the city of Budapest (Hungary)
  - Hydrobru : the public utility distributing water to the Brussels region (Belgium)
- Technical Partners:
  - Aragon Partners (Italy)
  - University of Limoges (France)
  - Fundación Nueva Cultura del Agua (Spain)
  - Aqua Publica Europea (Belgium)
  - Sara Bedin (Italy)

smart,met

Project Timeline

smart.met

PCP Timeline and Budget



PCP is organised in **3 phases:**

1) solution exploration and design (M12-16)
2) prototyping (M20-M30)
3) field testing (M30-45)

	DURATION	BUDGET*	EXPECTED R&D PROVIDERS	MAXI INDIVIDUAL BUDGET*
SOLUTION DESIGN	4 months	240,000€	8-10	30,000€
PROTOTYPING	9 months	1,500,000€	4-6	250,000€
FIELD TESTING	12 months	1,500,000€	2-3	500,000€

*including Italian VAT rate (22%)

smart,met

Where are we now?

- Needs assessment and description.

- Four Open Market Consultations were held in the following locations and at the following dates:
  - Spain, Madrid – 5 September 2017
  - Italy, Livorno – 11 September 2017
  - Belgium, Brussels – 20 September 2017
  - Hungary, Budapest – 27 September 2017

- More than 70 company (ICTs and meter manufacturers) attended the OMCs to discuss the several aspects of the project while also investigating the best and latest innovative solutions already available on the market today.

smart,met

What are we doing?
Design of the pre-commercial contract and definition of the contract documents

- Establishment of a Technical Evaluation Committee (7 utility technicians involved in the buyer group and a group of experts from the 4 consortium organizations for technology evaluation).
- The committee have the task of summarizing the needs for innovation in terms of functionality and performance of the water meters remote control system for the users without identifying a specific solution.

smart,met

Execution of the pre-commercial contract

- Phase 1 solution design: after the publication of the call for tenders, 8-10 bidders will be selected, who will be asked to describe their solution in detail. The Technical Evaluation Committee will analyze the solutions and issue a list of 6 selected solutions. 2 backup solutions.
- Phase 2 prototyping of the solutions: the suppliers selected for Phase 2 will develop an operational prototype of their solution; the Technical Evaluation Committee will issue a list of 3 prototypes chosen, plus 1 prototype.
- Phase 3 field testing: Phase Selected Suppliers will develop tests for each solution, which will take place simultaneously in 3 test sites (urban, rural, and mixed sites; the test sample size should be within the range of 300- 500 user counts each, the Technical Evaluation Committee will evaluate the results of the local test and issue recommendations for future implementation of the solutions.

smart,met

More questions?

Diego MACCHIELLA
diego.macchiella@viveracqua.it
045 8677762

Jean-Marc BERLAND
Project coordinator
jm.berland@oieau.fr
+33 5 55 11 47 58

http://smart-met.eu
@SmartMet_PCP

smart,met