wetnet wetnet http://www.wetnet.it wetnet@wetnet.it true monitoring of water networks For More information: Maurizio Creati, Project Manager, BRE Elettronica Srl +39 050 810640 m.creati@bre.pisa.it Franca Sussarellu, Project Information and Communication +39 050 843442 f.sussarellu@ingegnerietoscane.net Enrico Bertocchi, Business and market development (Italy, Europe) - Bimatik Sas +39 02 92889638 info@bimatik.it Juan Sobreira Seoane, Business and market development (Spain, Portugal, Latin America) ITG + 34 981 173 206 jsobreira@itg.es



WE HAVEN'T

WATER, JUST

TO MEASURE IT

A NEW WAY

INVENTED

INNOVATIVE

WETNET is based on an innovative low cost flow-meter and control system that enables water companies to improve greatly their capacity to control distribution networks in detail, cutting energy costs and emissions and making better use of water resources.



Co-funded by the Eco-innovation Initiative of the European Union ECO/12/332771 WETNET









2 EFFECTIVE





WETNET has been designed for flexibility. incremental deployment and size (number of sensors) scalability, co-existence and/or integration with existing measurement and control systems, minimal maintenance during an acceptable operational life time. to be replaceable and have a very low end-of-life impact. WETNET supervisory services allow a wide range of data elaboration and presentations (from simple alerts to simulations and predictions) to support decisions. The WETNET flow-meter, the communication subsystem (RTU and networking) and supervisory software are conceived to comply with market needs and certification-accreditation requirements and the European Technology Verification (ETV).

FUNCTIONAL

3





- Incremental deployment and size scalability from 5 to 500 nodes on pipes 50 to 1000 mm DN (accuracy +/- 2.5% on a scale of 0.25-1000 lsec or 1-10 bar
- Full or partial co-existence and/or integration with existing measurement and control systems and communication infrastructures
- Hot-tap installation of the flow-meter insertion fittings using standard hot-tap saddles
- Programmable measurements from 1 per sec to 1 per day in a scale from 0.2 to 1000 litres/sec with a tolerance within +/- 2.5%
- External operating temperatures allowed between -10°C to +45°C
- Direct linkability to other systems via MODBUS and upper level XML-based protocol
- ▲ Little or no maintenance (MTBF > 3 years) during an acceptable operational life time (> 5 years), replaceable and with a very low end-of-life impact
- ♦ Open elaboration capability
- ▲ Local data storage and unit conversion
- Supervisory Services software capable of configuration and test functions, web based monitoring in standalone mode Interface with ProGea MOVICON SCADA (and others SCADA)
- ▲ Asynchronous import/export of data sets
- Functions may be accessed also through SaaS (Software as a Service)

WETNET scalability and flexibility makes it fit for major operators as well as for small municipality services. Running a network efficiently requires fine-grained, precise, timely data to take decisions based on solid evidence. Until now in-pipe measurement has been treated as exceptional. Very precise, very costly, very difficult to install. Or movable, easy to install and remove, but manned and costly. When a network is created from scratch a number of solutions can be experimented. Not so when pipes are of different age and type, when networks are managed with different approaches. What is needed is a solution that fits seamlessly in water operators' daily work. Similarly maintenance and replacement must be easy and cheap. Other relevant issues are flexibility, in terms of configuration and resolution, and scalability in terms of degree of delegation and automation.

4

EASY AND LOW COST

