SAWA
sensors and water

Monitoring and dynamic modelling drinking water in distribution network

SAWA is a Dutch innovation project in which mainly Northern based companies and knowledge institutes join forces to develop real time sensors for applications concerned with drinking water quality. The project is an initiative of Waterlaboratorium Noord (WLN), N.V. NOM, Waterbedrijf Groningen, Waterleidingmaatschappij Drenthe and Sensor Universe. SAWA has three sub-projects. One of them is monitoring distribution network.

Objective project monitoring distribution network

To monitor the development of smart and inexpensive sensors which measure the quality and quantity parameters of water in the drinking water mains online and in real-time.

Project Setup

There are three measurement methods being tried out in the Sentec for six different water types.

Aqua Explorer

Aqua Explorer has developed a detection system to determine the total plate count, colony forming and legionella in mains water. The method is based on FISH (Fluorescence In Situ Hybridisation). This system is being optimised together with Noordelijke Hogeschool Leeuwarden.

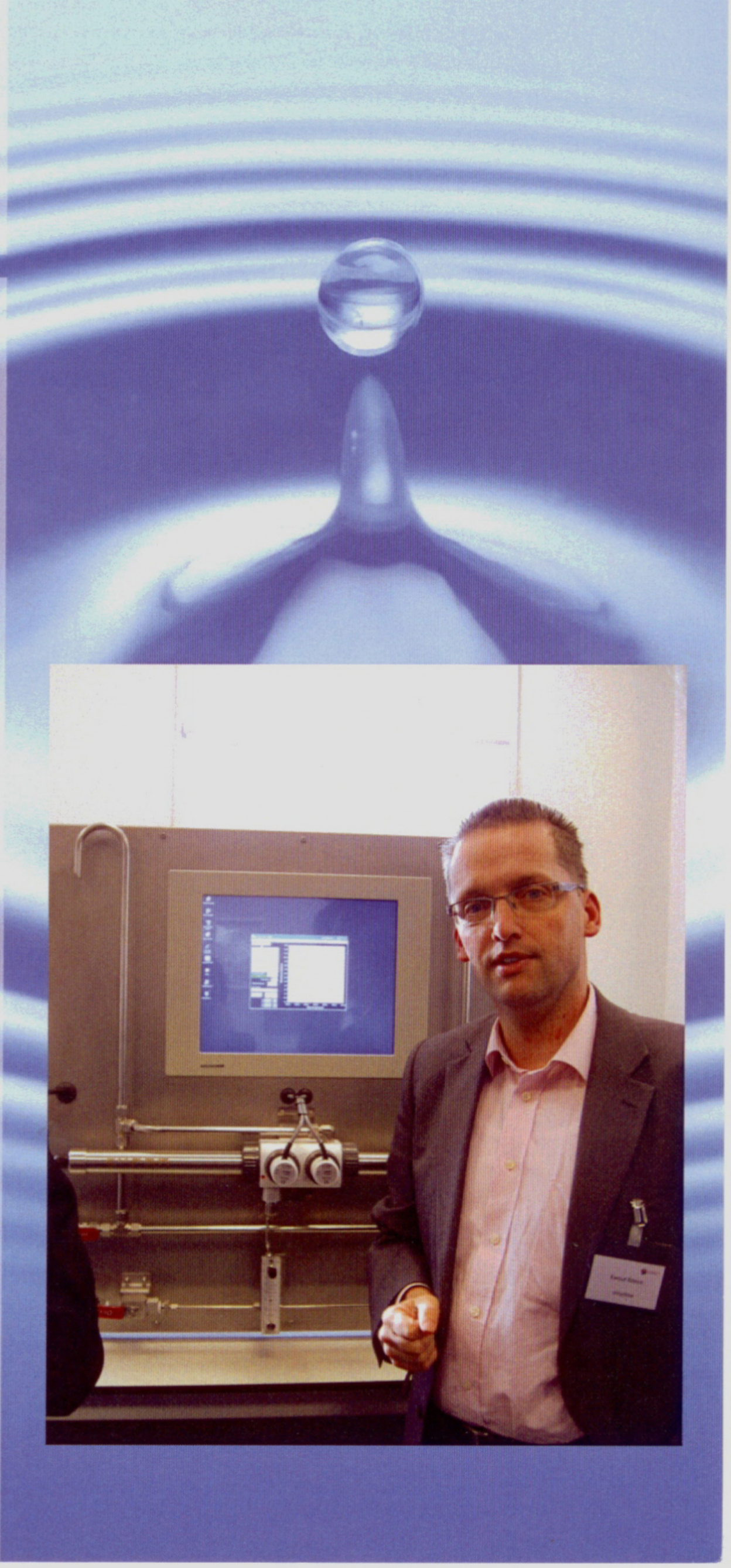
BrightSpark sensor

Bright spark is working on a standard sensor array with which inexpensive sensors can be produced to reliably measure variables such as temperature, flow, pressure and turbidity.

Interline

Interline is using a sensor measurement technology based on potential differences between various metals.

The results are compared with those of the traditional method used at Waterlaboratorium Noord. The purpose of this is to optimise these sensors. The LegioBox of AVIC is used as a hardware platform for the data. 2M Sensors is working on the assessment of new sensors and sensor technologies for use in



the low-cost sensors. INCAS³ contributes know-how for the development of the finely-meshed low-cost sensor network. Half-way through the project the sensors will be tested in the distribution networks of Waterbedrijf Groningen and Waterleidingmaatschappij Drenthe.

Duration and cost

The SAWA project began early 2010 and lasts until July 1, 2013. The project will cost over 8 million euros. Just over half of this amount will be yielded by the participating parties. This project is co-financed by the Northern Netherlands Provinces (SNN), the European Union, European Fund for Regional Development and the Ministry of Economic Affairs, Agriculture and Innovation , Pieken in de Delta, and the three provinces Friesland, Groningen and Drenthe.

provincie groningen

provinsje fryslân
provincie fryslân

provincie Drenthe

SNN

Ministerie van Economische Zaken, Landbouw en Innovatie

NHL HOGESCHOOL

wln waterlaboratorium | noord

WMD water

2M Sensors Ltd.
Innovative sensor developments

Waterbedrijf Groningen

AVIC

incas³

Interline

Aqua Explorer
INNOVATIONS IN WATER

Bright Spark

Test centre SenTec

SenTec, the sensor test centre developed especially by SAWA, accommodates all of the facilities needed to test and calibrate the developed sensors on surface water of the Drentsche Aa and to compare the results with the traditional methods. SenTec is established at the premises of the Waterlaboratorium Noord (WLN) in Glimmen.

More information?

Want to learn more about SAWA and SenTec, please visit www.projectsawa.nl or contact Martha Buitenkamp, m.buitenkamp@anantis.nl, +31 50 5272640 / +31 6 21578477

SAWA is partly initiated by:

SENSOR UNIVERSE

NOM
INVESTEREN IN ONTWIKKELING