

 Future Processing

SmartFlow



WATER
LOSSES
MONITOR



www.smart-flow.eu

WHAT IS SMARTFLOW?

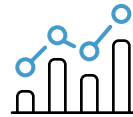
SmartFlow is a system used for monitoring waterworks infrastructure parameters. It is based on sensors built into the waterworks around the city. The sensors collect and transmit real-time information about water distribution which is then analysed and processed by the system. In case of any anomalies, location of the fault is visualised on the map of the city, making it easier for the engineers to locate and repair the fault. The system effectively tackles the problem of hidden leakages which means that if failures occur, they are attended to quickly and no longer generate major losses.



COLLECTION OF DATA FROM SENSORS



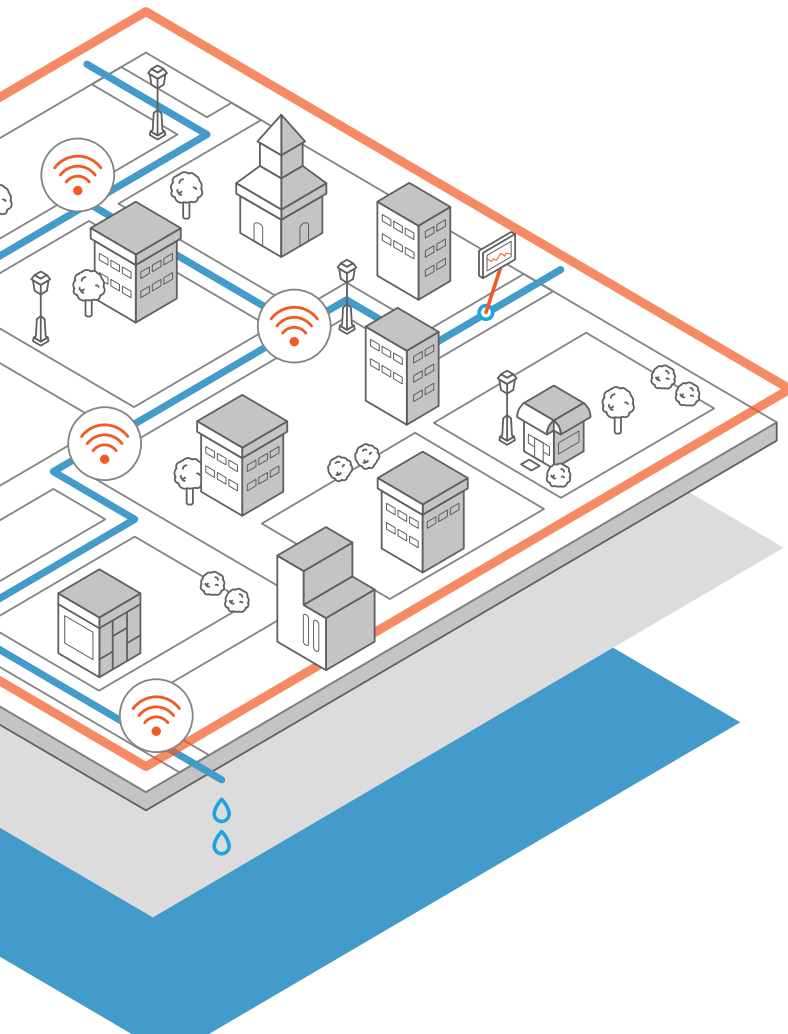
PROCESSING AND ANALYSIS



DIAGNOSIS AND VISUALISATION



ALERT



BENEFITS

- ▶ Tangible water savings through an earlier detection of leakages
- ▶ Faster reaction to anomalies within the water supply system
- ▶ Intelligent and ecological management of water supplies
- ▶ Easier and quicker analysis of data
- ▶ Better management of water supply system

SMARTFLOW'S CAPABILITIES

- ▶ The data on the state of the water network is gathered in one system
- ▶ Visualisation of the network, data analysis and alarming on anomalies
- ▶ Automatic analysis
- ▶ Adapting the methods of diagnoses and analysis to suit client's needs
- ▶ Analysis of multiple parameters
- ▶ Implementation in any area
- ▶ Possibility of real-time data processing

IMPLEMENTATION OF SMARTFLOW AT MPWIK WROCŁAW



MPWiK Wrocław is the municipal water supplier for the Wrocław agglomeration. It is in the top 5 biggest water supply enterprises in Poland. In addition to its regular business activity, MPWiK, chooses innovative solutions that save natural habitat and resources by cooperating with universities and environmental research facilities. Its activity is supported and developed by the MPWiK's New Technologies Centre, an internal research and development unit. In 2015, MPWiK teamed up with **Future Processing** and **Microsoft** to develop a system to tackle the problem of hidden leakages. The result of this cooperation is SmartFlow.

EFFECTS OF THE COOPERATION

- ▶ **500 mln** litres of water saved in 2016 alone
- ▶ **9%** reduction in water loss
- ▶ **72h** - maximum time to locate and fix failures
- ▶ **80%** of Wrocław's area monitored by SmartFlow
- ▶ Thanks to SmartFlow the detection of anomalies shortened from **180 days to 3 days** localising hidden leakages is much easier

MPWIK WROCŁAW IN NUMBERS

WATERWORKS' LENGTH:

2 037 KM

NUMBER OF CONNECTORS :

APPROX. 41 300

NUMBER OF HYDRANTS :

APPROX. 14 100

DIAMETERS OF PIPELINES:

80 - 1200 DN

NUMBER OF LOCKS:

62 700

NUMBER OF MAIN WATER METERS:

49 200

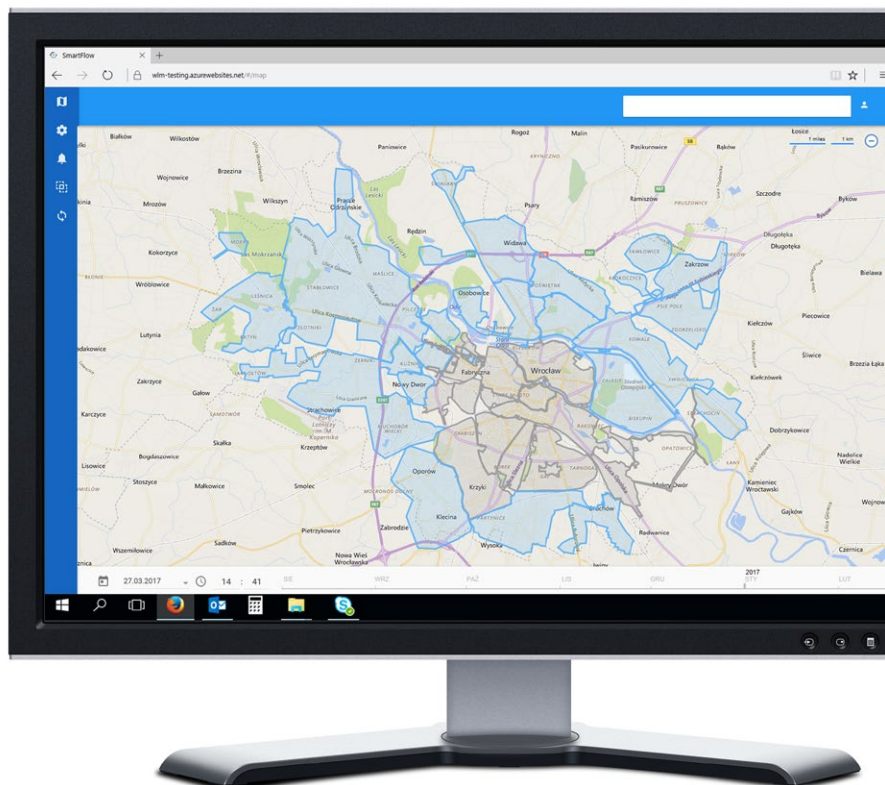


REFERENCES

Application in easy and transparent way allows to monitor waterworks infrastructure parameters. Notification system, with use of customized warnings and alerts, indicates dispatchers the corresponding DMAs and flowmeters with found abnormalities. It gives waterworks service the ability to react quicker and more precisely to potential leakage or unauthorised consumption.

TOMASZ KONIECZNY

Director of the Centre of New Technologies
MPWiK S.A. Wrocław

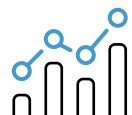




STABLE WATER SUPPLY MANAGEMENT MEANS:



ECOLOGY - PREVENTING HYDROLOGICAL DROUGHT



EFFICIENCY - FASTER REACTION TIME TO DAMAGES



COST-EFFECTIVENESS - MINIMISING WATER AND ENERGY LOSSES

CONTACT WITH US!

 **Future Processing**

ul. Bojkowska 37A
44-100 Gliwice
POLAND

+48 324 384 306
smartflow@future-processing.com
www.future-processing.com
www.smart-flow.eu