MONITORING, CALMING AND BURST ALERTING

SUPPLY WATER NETWORKS

Syrinix

Intelligent Pipeline Monitoring

From small rural communities to bustling urban cities, many of the world's supply water utilities are faced with aging distribution network infrastructure and, at the same time, restricted budgets. Pipeline preservation has never been more important, but network operations – pumps and valves – and third-party activity can cause pressure spikes that take a toll on infrastructure and increase leaks and bursts.

PATENTED HARDWARE

Automated alerts including location	Immediate notification of a burst including its location* and size estimate to reduce response times and save money.
High resolution precision data for network calming	Always-on 128Hz sampling with precision timing auto-maintained without GPS identifying a broad range of damaging pressure events and their causes*.
Easy Total / Static Head analysis	Review events on a standardised basis without distortions from total head differences.
Sophisticated "zone"/ "threshold" alerting	Configurable for individual data feeds including immediate alerts to notify users when an upper/lower threshold (eg pressure, water quality) is breached.
Automated status alerts and remote upgrading	View, manage and update units easily and remotely.
7-day diurnal reporting	Compare pressures against a rolling 7-day average with automated alerts for deviations eg due to leakage.

* with GIS layer integration

PIPEMINDER ONE

STANDARD

Flexible power options
(battery, mains, solar)

EXTERNAL SENSOR

For deep chambers or
threat of frost

PROPRIETARY PLATFORM

Powerful highly intuitive "RADAR" user interface	See what you want and need in detail without lengthy training / roll-out programs.
Third-party data import and display	Easily import third-party data into RADAR for a "single screen view" including water quality, pressure, flow and SCADA pump / valve status changes.
Configurable automated filtering and alerts	Avoid data-overload and focus easily on what you need to with customisable alerts to highlight when important changes occur.
Secure cloud-based platform	See what you need to see from wherever you need to see it, auto-scaled for your device.
Customer API and simple data integration / export tools	Easily integrate your network data with simple to use tools and APIs for importing and exporting data sets and alarms.
Advanced GIS and Google Maps integration	Including street and satellite views and GIS overlay options to see your network as it actually is.

DATA-LED INSIGHT ON YOUR NETWORK

For the Operator

- **Reduce leaks and bursts**
- **Save time**
- **Save money**
- **Focus on what you want / need to see**
- **Respond faster to events**

For the Utility

- **Provide great service**
- **Save water**
- **Protect the environment**

"Knowing that you can accurately and automatically detect events is a massive step change and the implementation of a deployment tool that can be used to plan the network is a major step forward towards a live operational system."

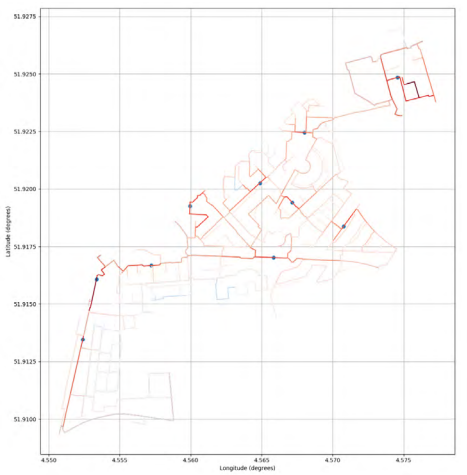**Robert Anthony-Scorse**
Network Manager

South East Water

Evides, The Netherlands

Dutch utility company Evides partnered with Syrinix to discover if transient monitoring could be used not only to locate and detect bursts but feed a targeted operational response. The Syrinix deployment planning tool was used to select refined deployment locations and predict network response to a set of simulated events.
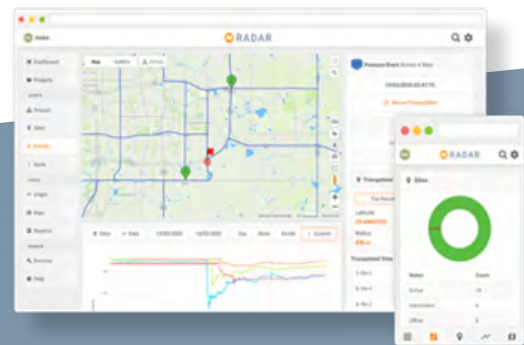
Using its **S3** scoring algorithm, **PIPEMINDER** immediately transmits high sample rate data over the cellular network to **RADAR**, which automatically analyses the data from each of the multiple sensors and determines the exact onset of the pressure wave at each monitor. Onsets from

Syrinix Deployment Tool

multiple sites are then grouped together into an event and the event source location calculated using Syrinix's triangulation algorithm.

The ability to quickly review and re-process the event improved the position of the triangulation to within 42m of the true location, placing the response team close to the burst. This project is continuing with Evides as they work towards transient measurements with triangulation in areas with large industrial users and for burst detection in more rural areas.

About Syrinix

Syrinix is an award-winning global market leader in developing intelligent pipeline monitoring technologies, including the PIPEMINDER-ONE series for water and wastewater monitoring, the RADAR cloud-based network analysis platform, and Syrinix Intelligence analysis and consultancy services. Syrinix helps cost-conscious utilities move network management from reactive to proactive, detecting and mitigating network issues before they become failures.

www.syrinix.com