Bunt*Brain*
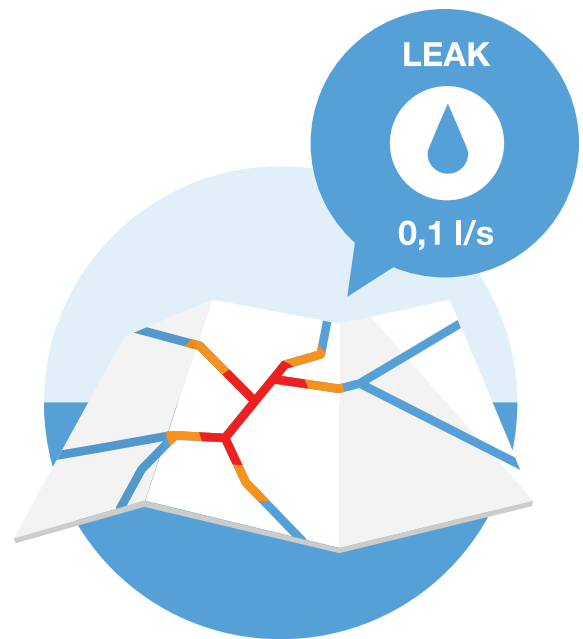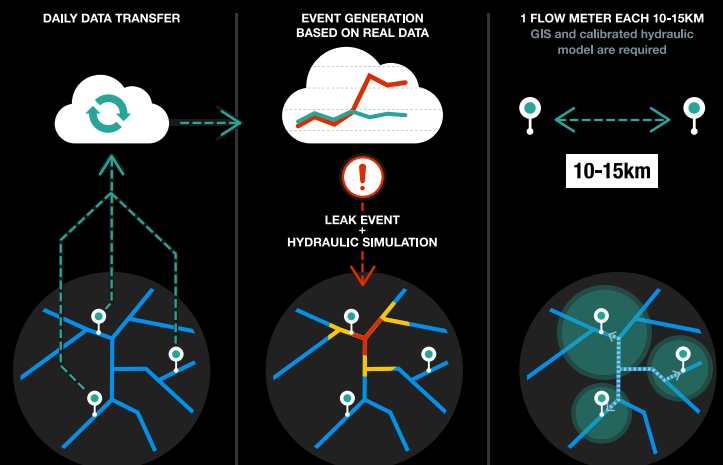# LeakFinder

Advanced leak detection

BuntPlanet, an innovative software engineering company, provides **smart water solutions** based around **Artificial Intelligence (AI) algorithms.** Its **BuntBrain software** has been awarded funding from the prestigious **EU Horizon 2020** fund (SME Instrument Programme) and the technology is being rolled out at water utilities in 12 countries in Europe, Latin America and Canada.

LEAK

0,1 l/s

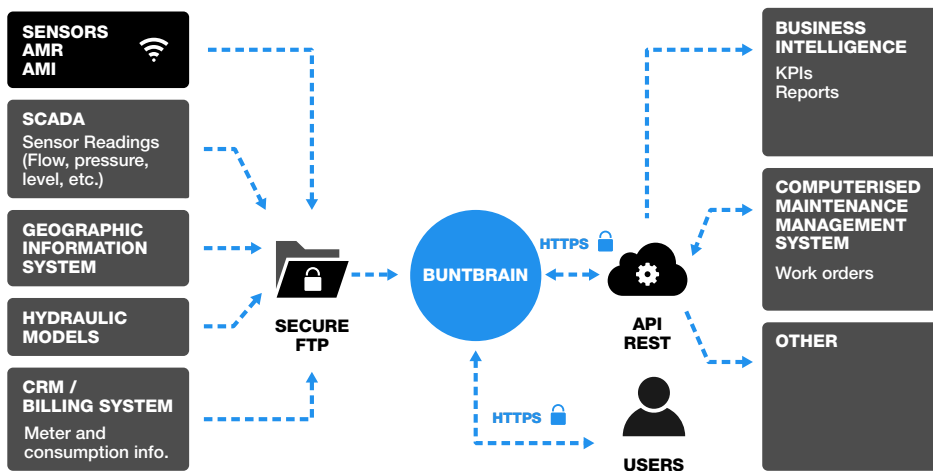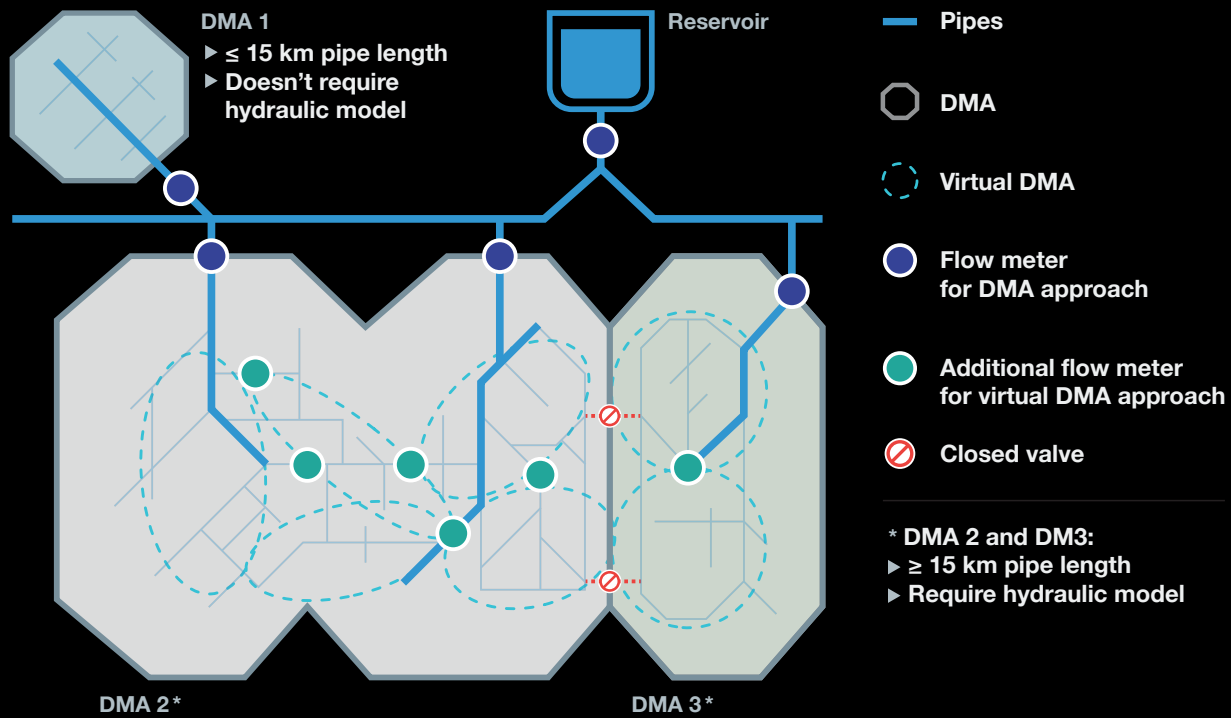## 'Big Data' and 'AI' based Smart Water Solution

BuntBrain LeakFinder's smart algorithm learns from user feedback. The software operates through hydraulic simulation to:

✓ Reduce leakage by up to 50% and **detect even small, early stage leaks (<0.3 l/s) before they can escalate** (33% smaller leaks than competing products can detect).

✓ Prevent infrastructure damage (pipe bursts).

✓ Reduce the time required for leak detection and positioning.

✓ Size and **position leaks with high accuracy** (<300m compared to typically >1,000m for competitors).

✓ Offer water utilities **a return of investment of less than one year** (including the cost of installation of internal flow meters, required for data collection).

DAILY DATA TRANSFER

EVENT GENERATION BASED ON REAL DATA

1 FLOW METER EACH 10-15KM
GIS and calibrated hydraulic model are required

10-15km

LEAK EVENT + HYDRAULIC SIMULATION

BuntBrain LeakFinder is suitable for every pipe material, works under all weather conditions and involves no compromises to water quality and supply during the night. It enables water networks to be designed around large DMAs (>15 km pipe length) without losing accuracy. **BuntBrain LeakFinder** works with any kind of flow meters.

BuntPlanet

Proven & Tested Benefits in Varied Water Market Conditions

DMA 1
▶ ≤ 15 km pipe length
▶ Doesn't require hydraulic model

Reservoir

Pipes

DMA

Virtual DMA

Flow meter for DMA approach

Additional flow meter for virtual DMA approach

Closed valve

* DMA 2 and DM3:
▶ ≥ 15 km pipe length
▶ Require hydraulic model

DMA 2 *

DMA 3 *

SENSORS AMR AMI

SCADA
Sensor Readings (Flow, pressure, level, etc.)

GEOGRAPHIC INFORMATION SYSTEM

HYDRAULIC MODELS

CRM / BILLING SYSTEM
Meter and consumption info.

SECURE FTP

BUNTBRAIN

HTTPS 🔒

HTTPS 🔒

API REST

USERS

BUSINESS INTELLIGENCE
KPIs
Reports

COMPUTERISED MAINTENANCE MANAGEMENT SYSTEM
Work orders

OTHER

BuntBrain LeakFinder: Fees linked to leak reduction levels

The BuntPlanet software operates on a SaaS (Software as a Service) basis, with an annual fee. Even at normal upfront fee rates, the software offers a rapid payback on the initial investment by the water utility, typically less than one year.

BuntPlanet