

INTRODUCTION

Asoti engineering pvt. Ltd. Is an engineering and technology solutions provider delivering specialized solutions in the water & biogas sectors in India. We established in Nov-2024, the company combines international technology partnerships with application-focused engineering and technical support. We are the authorized distributor for Hermann Sewerin since 2024.

Key products/services/areas:

The company provides water leak detection and localization systems, pipeline and utility detection solutions, biogas analysers and monitoring systems, gas chromatography and dew point measurement solutions.

Key sectors/markets:

Asoti serves water utilities, water and wastewater infrastructure, & biogas analyzer for industrial applications,

brief impact/value proposition:

Asoti engineering helps customers reduce water losses, improve network efficiency, monitor and optimise biogas processes, enhance operational safety, and support sustainable mobility through reliable measurement, detection and charging technologies.





OUR PRODUCTS

UNDER WATER LEAKAGE DEDUCTION SYSTEM

1. AQUATEST T10
2. AQUAPHON A 200/150/50
3. SECORRPHON AC200
4. SEPEM 352/352/150/100

LEAK DETECTION PIPE AND NRW LOCALIZATION

100 YEARS OF EXPERIENCE





Hermann Sewerin is the inventor of the first gas leak detection device 100 years ago.

TODAY WE ARE THE PREMIUM PARTNER FOR OUR CLIENTS IN THE GLOBAL WATER-, GAS- AND ENERGY-SECTOR, WITH

- Groundbreaking,
- Safe & Efficient
- Resource Management Solutions.



Gütersloh Germany
Headquarters

107

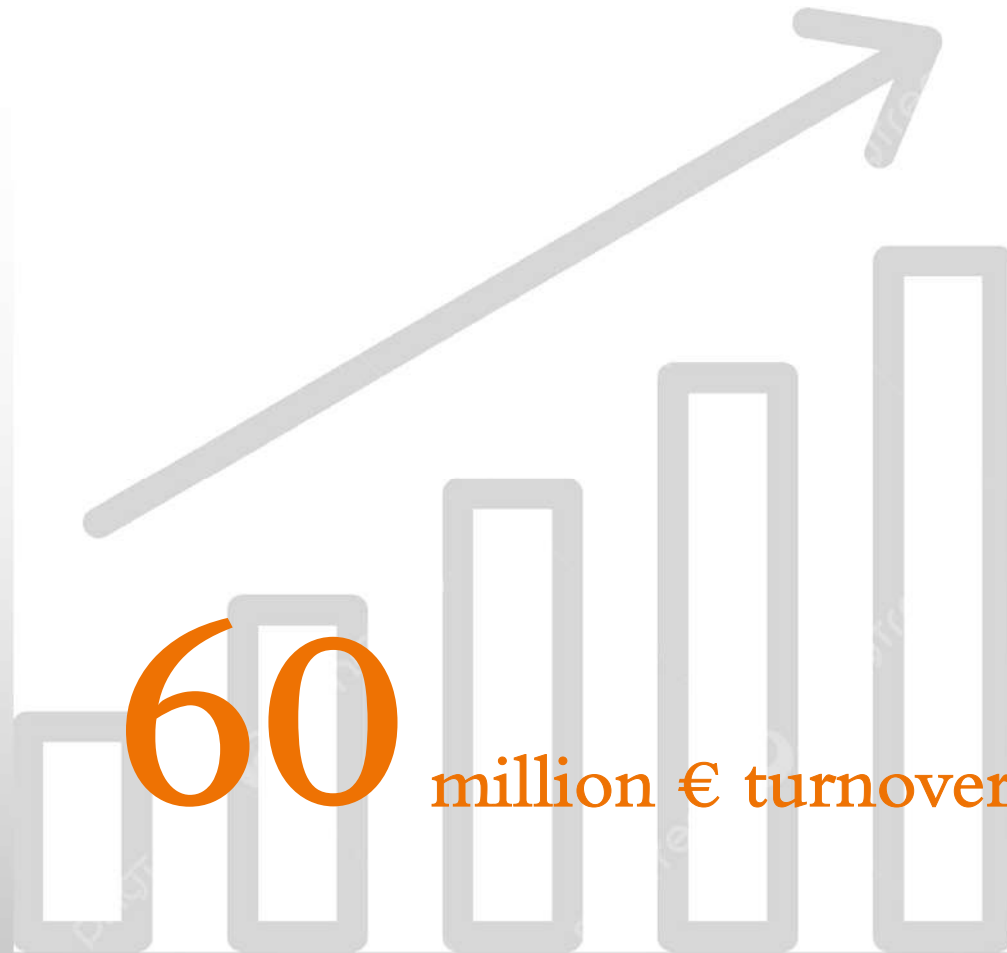
Countries

73

Distribution
Partners



300 employees



BUSINESS AREAS



Leak Detection
Service



RESOURCE MANAGEMENT & MEASURING
SOLUTIONS



Vehicle
Customization

SEWERIN GOES IOT

SEPEM[®] 351
AND MORE...

THE EVOLUTION OF SEPEM®

SEPEM® – TODAY



- A COMPLETELY NEW FAMILY OF LOGGERS – 100% COMPATIBLE TO EXISTING **SEPEM®**
- **SEPEM® 100** – RADIO LOGGERS WITH INTERNAL ANTENNA FOR MOBILE USE
- ONE MICROPHONE CONCEPT, VARIOUS UPPER HOUSING SOLUTIONS TO OFFER MULTIPLE VARIANTS

THE EVOLUTION OF SEPEM®

SEPEM® – TODAY



- A COMPLETELY NEW FAMILY OF LOGGERS – 100% COMPATIBLE TO EXISTING **SEPEM®**
- **SEPEM® 150** – RADIO LOGGERS WITH EXTERNAL ANTENNA FOR MOBILE OR STATIONARY USE
- TO FOLLOW THE **SEPEM® 01**
- SUITABLE TO FIT DIFFERENT MEASURING POINTS' DESIGN

THE EVOLUTION OF SEPEM®

SEPEM® – TODAY



- A COMPLETELY NEW FAMILY OF LOGGERS – 100% COMPATIBLE TO EXISTING **SEPEM®**
- **SEPEM® 200** – CABLE-BOUND LOGGERS FOR CUSTOMERS' RADIO SYSTEMS
- TO FOLLOW THE **SEPEM® 01 CR**

THE EVOLUTION OF SEPEM®

SEPEM® – TODAY



- A COMPLETELY NEW FAMILY OF LOGGERS – 100% COMPATIBLE TO EXISTING **SEPEM®**
- **SEPEM® 300** – GSM ROAMING LOGGER, INCLUDING DATA TRANSMISSION FOR 4 YEARS, HERMETICALLY SEALED
- DATA COVERAGE OF UP TO 79 COUNTRIES WORLDWIDE
- TO FOLLOW THE **SEPEM® 01 GSM**

SEPEM® 351

- DAILY DATA TRANSMISSION
- TYPICAL OPERATING TIME OF **9 YEARS**
- HYDROPHON VERSION AVAILABLE
- IOT*  STANDARD



*Internet of Things

SYSTEM INTEGRATION

POSSIBILITIES



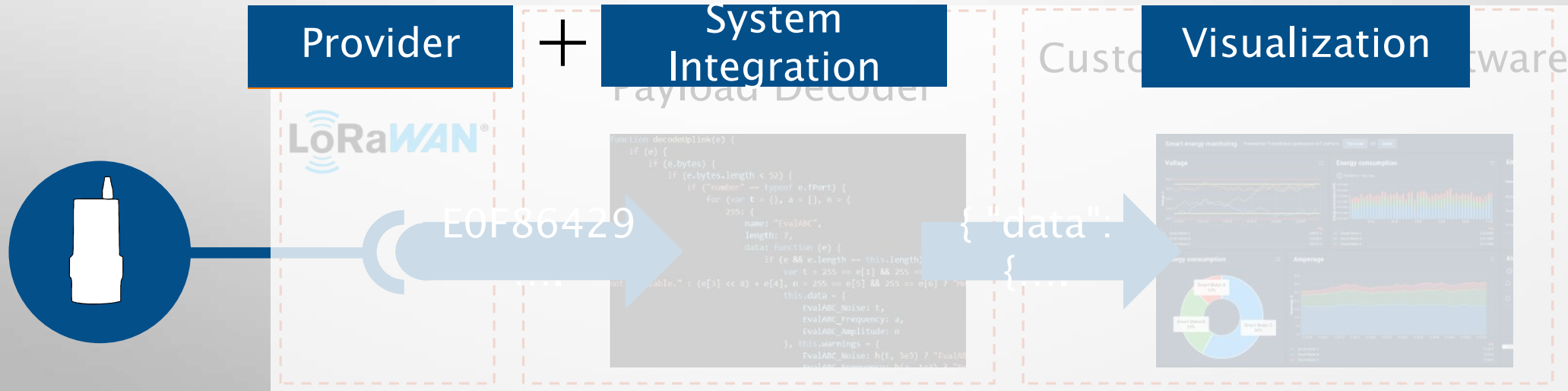
SYSTEM INTEGRATION

1. INTEGRATION INTO CUSTOMERS' SMART CITY



SYSTEM INTEGRATION

1. LoRaWAN Provider, e.g. Orange
2. Field Setup and Message Decoding
3. Visualization and Analysis



SYSTEM INTEGRATION

2. SEPORT® - SEWERIN CLOUD SOLUTION



SEPORT® BETA IN FRANCE



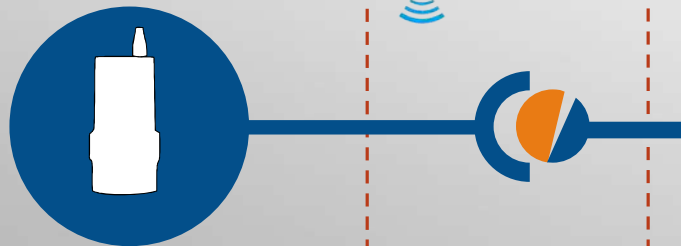
SePort®

- Backend
- Running on Microsoft Azure
- Data Centers in Europe (Frankfurt and Munich)
- Multiple Frontends (Browser based)



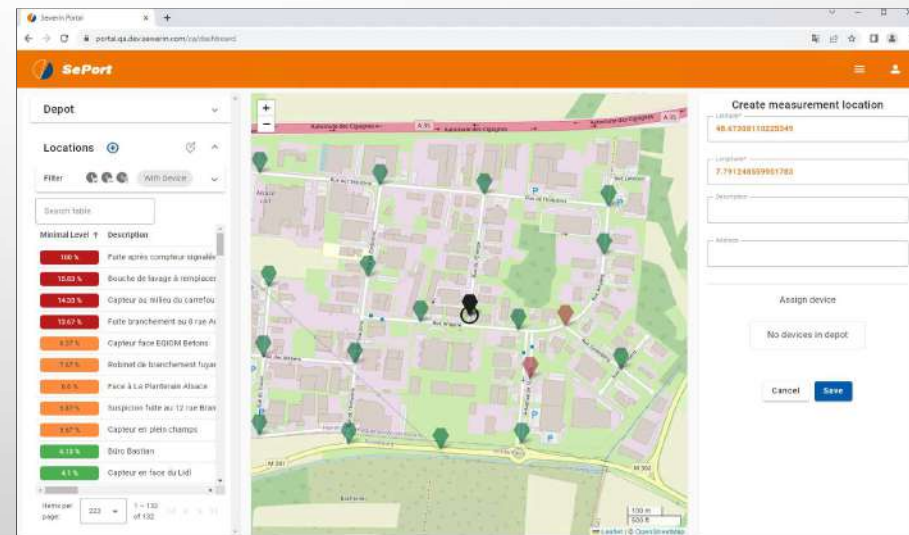
orangeTM

Network





1st Frontend: Prelocation WebApp



SEPORT® PRELOCATION WEBAPP

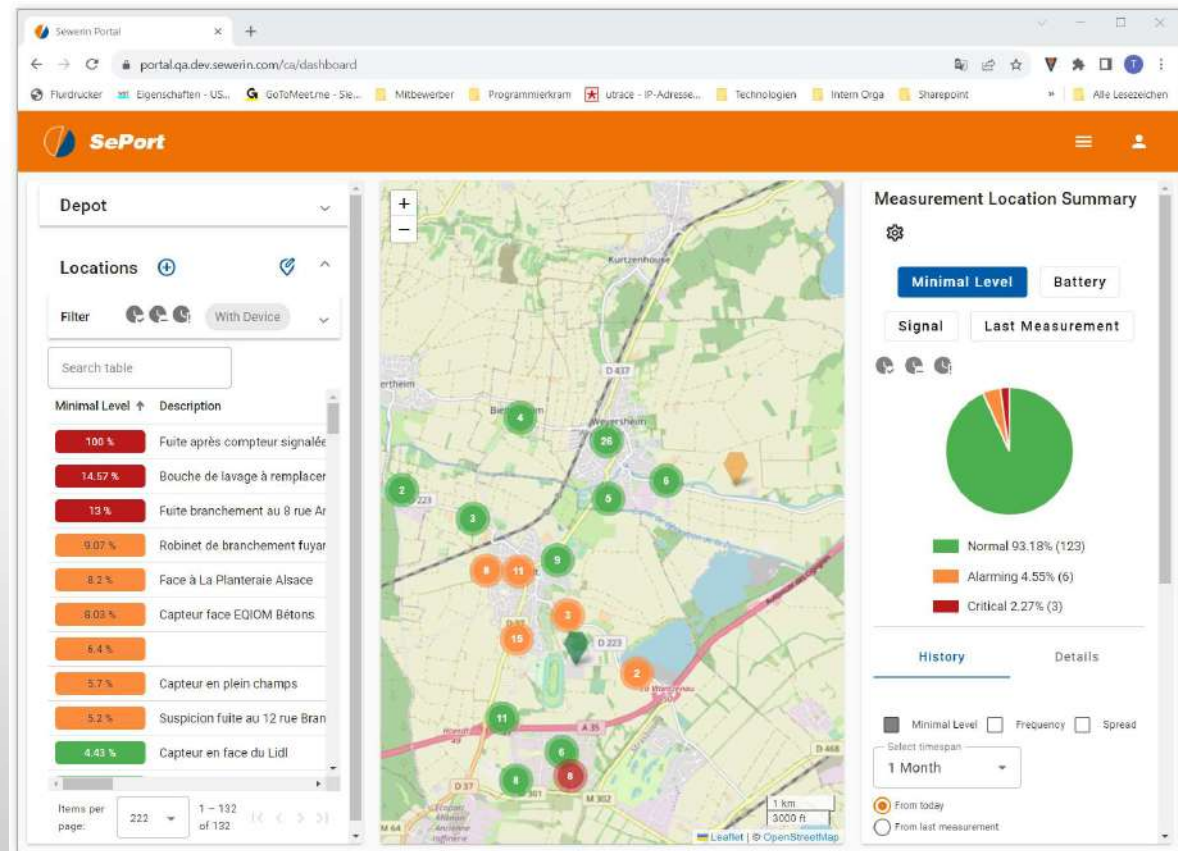
BETA-VERSION



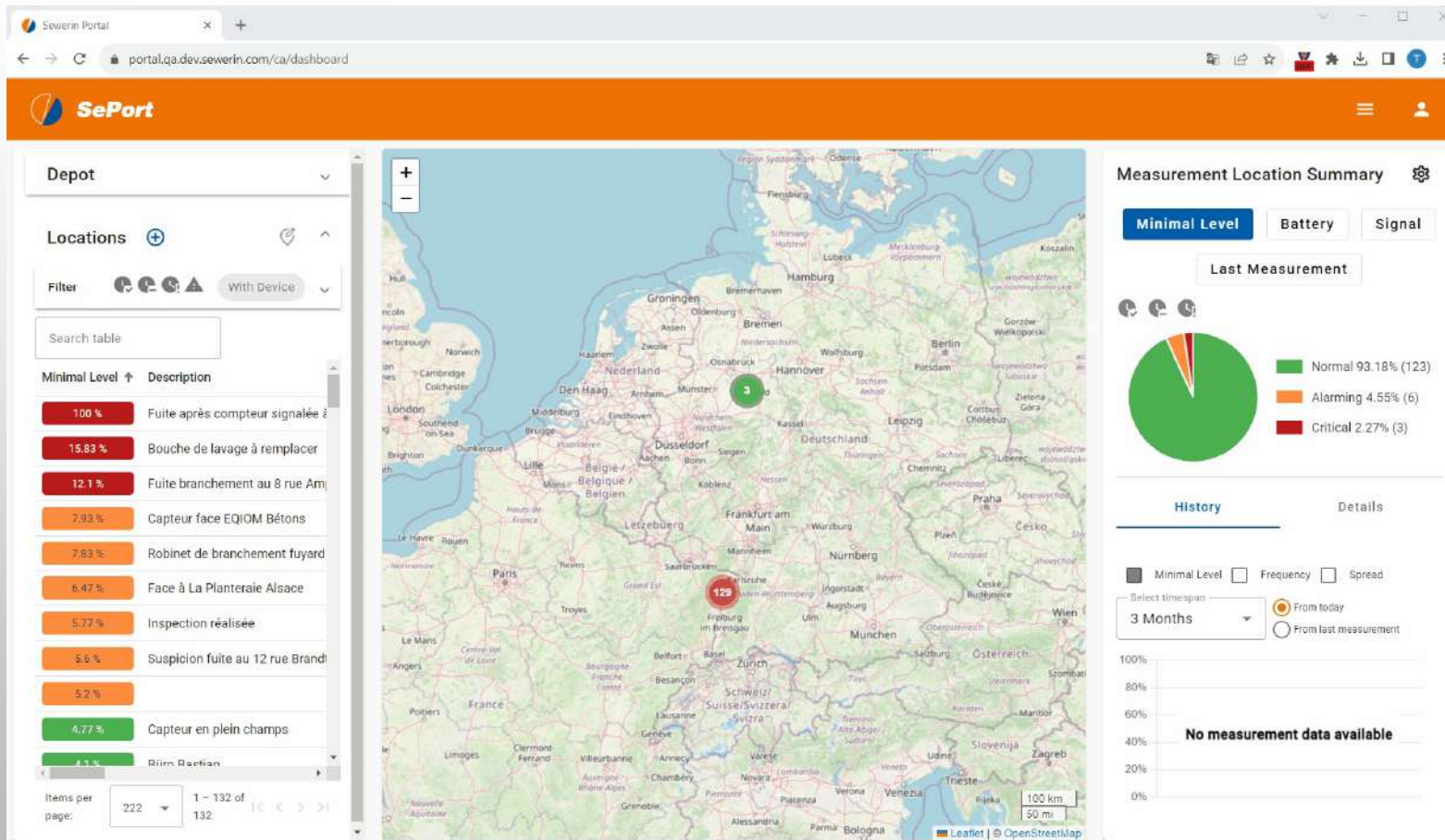
- MAP CENTERED DASHBOARD
- BROWSER BASED
→ NO INSTALLATION



- SUPPORTS E.G.



SEPORT® PRELOCATION WEBAPP

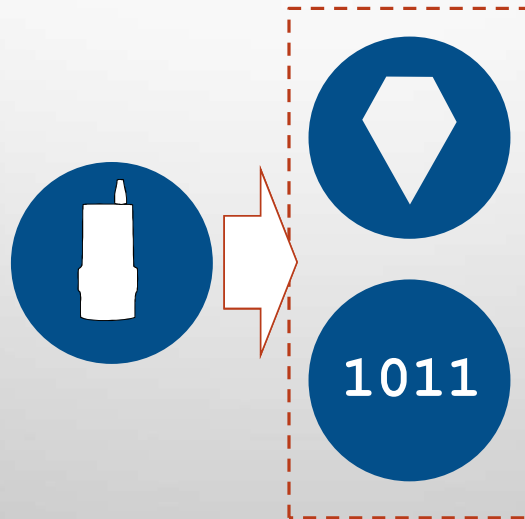
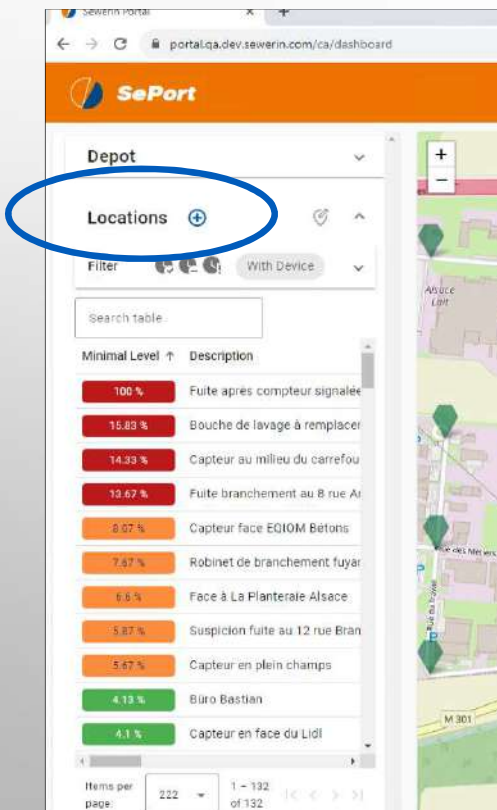


CONCEPT: MEASUREMENT LOCATIONS

Data is bound to a location...

... not a device

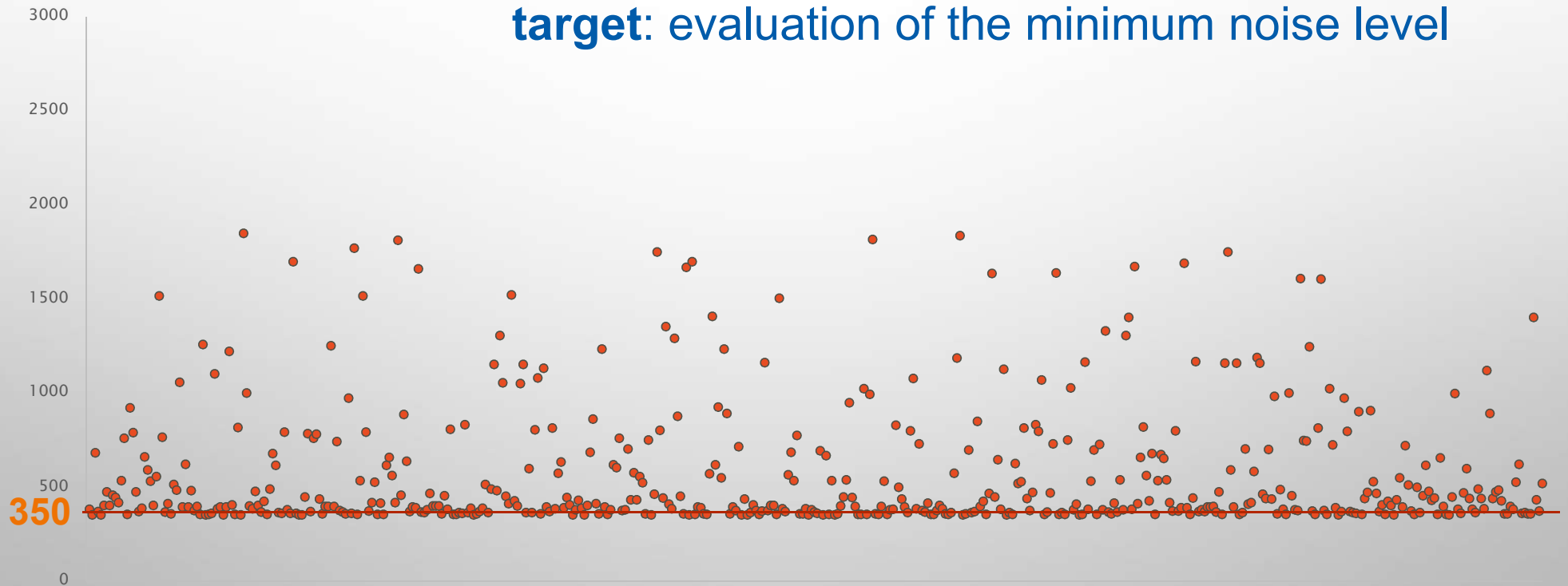
- Asset centered
- Locations generated by e.g. GIS import
- Manifold data sources possible



NOISE LOGGING

HOW DOES A NOISE LOGGER WORK?

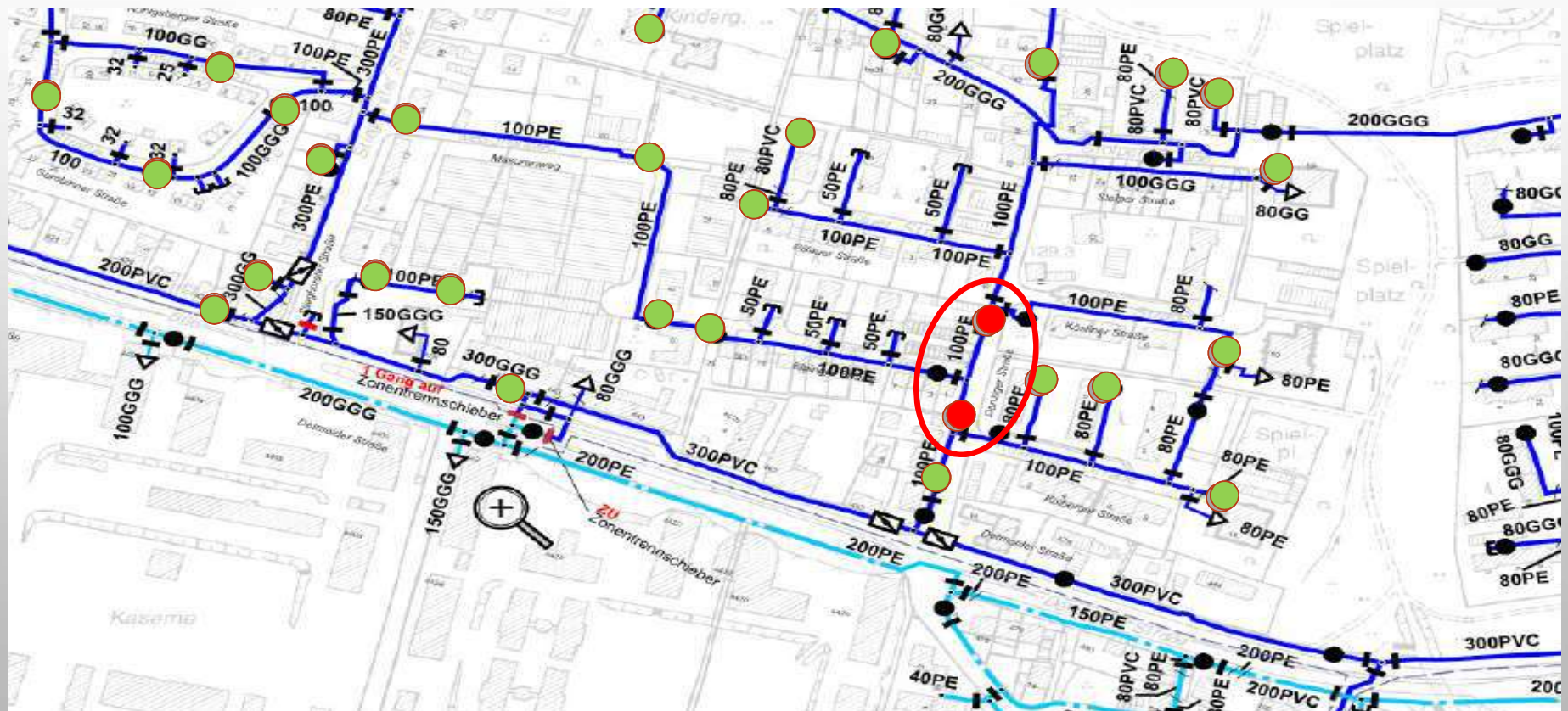
target: evaluation of the minimum noise level



Measuring for 60 minutes // sampling 1 value per second

NOISE LOGGING

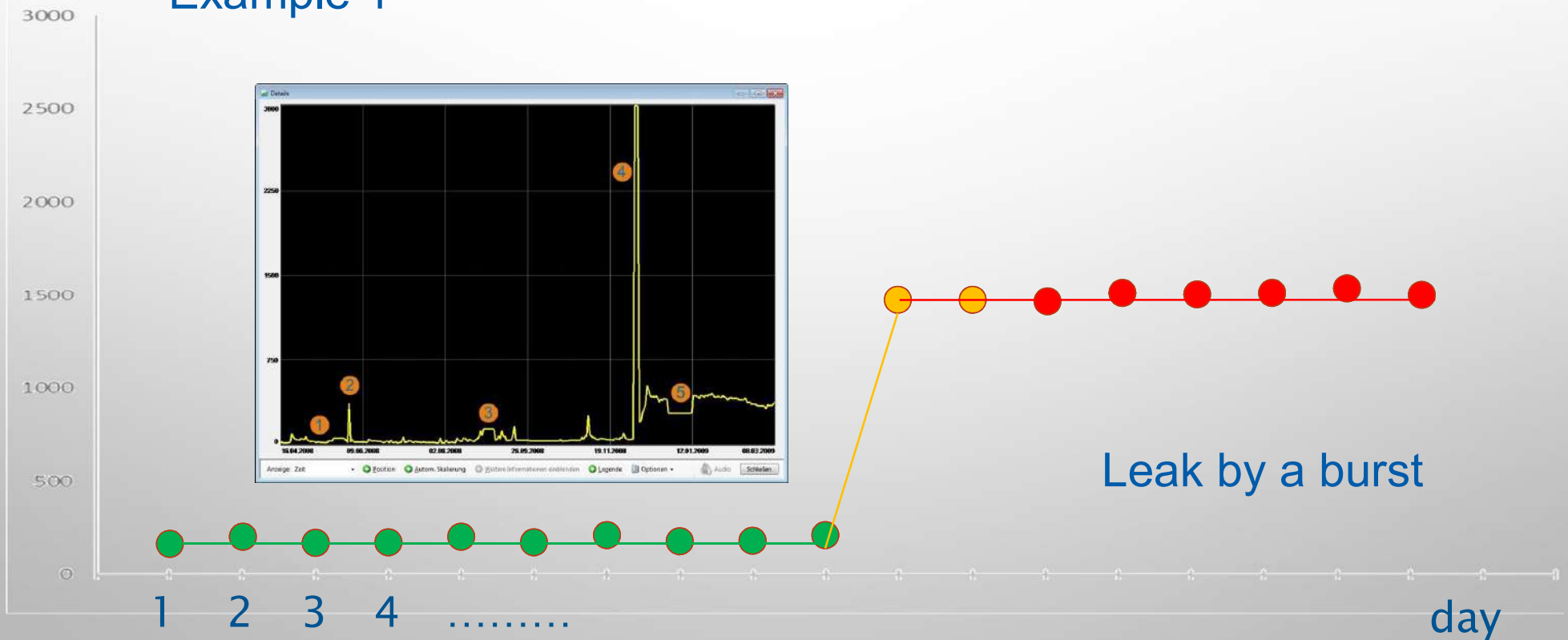
MOBILE LOGGING (LIFT & SHIFT)



NOISE LOGGING

STATIONARY NOISE LOGGING

Example 1

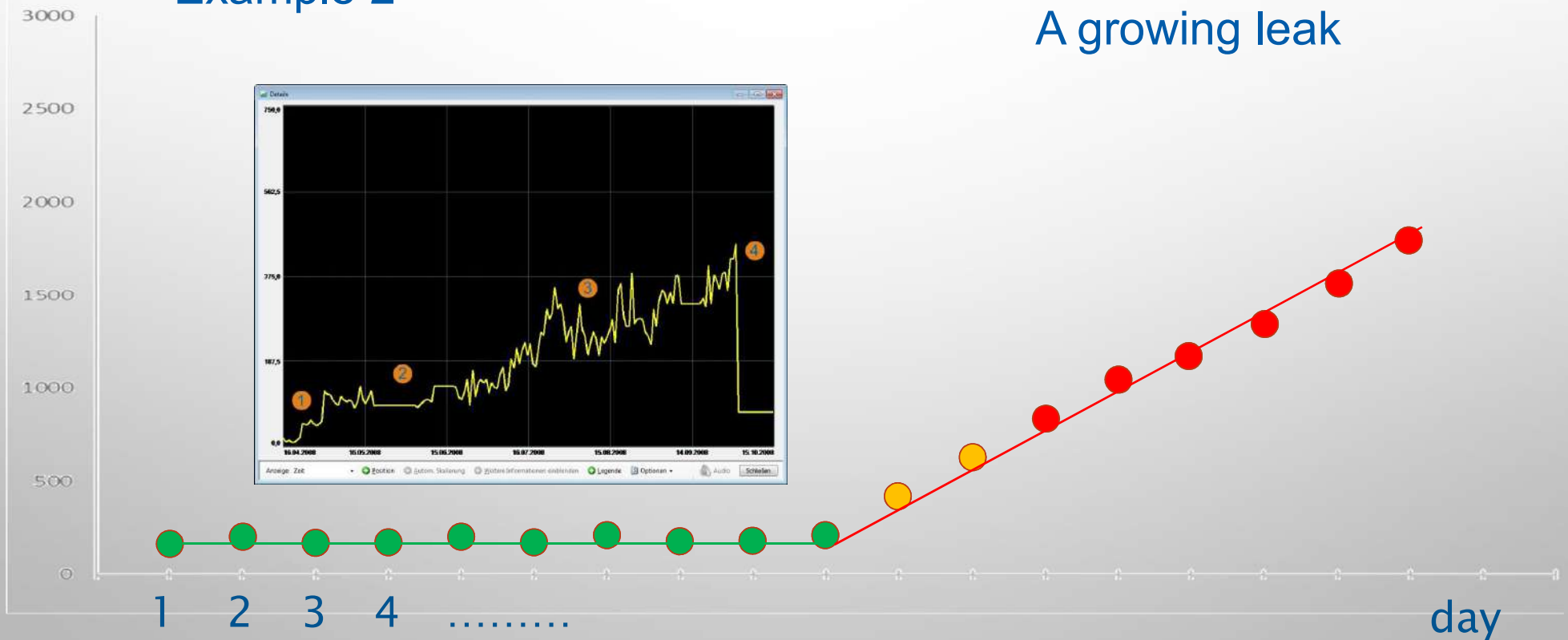


NOISE LOGGING

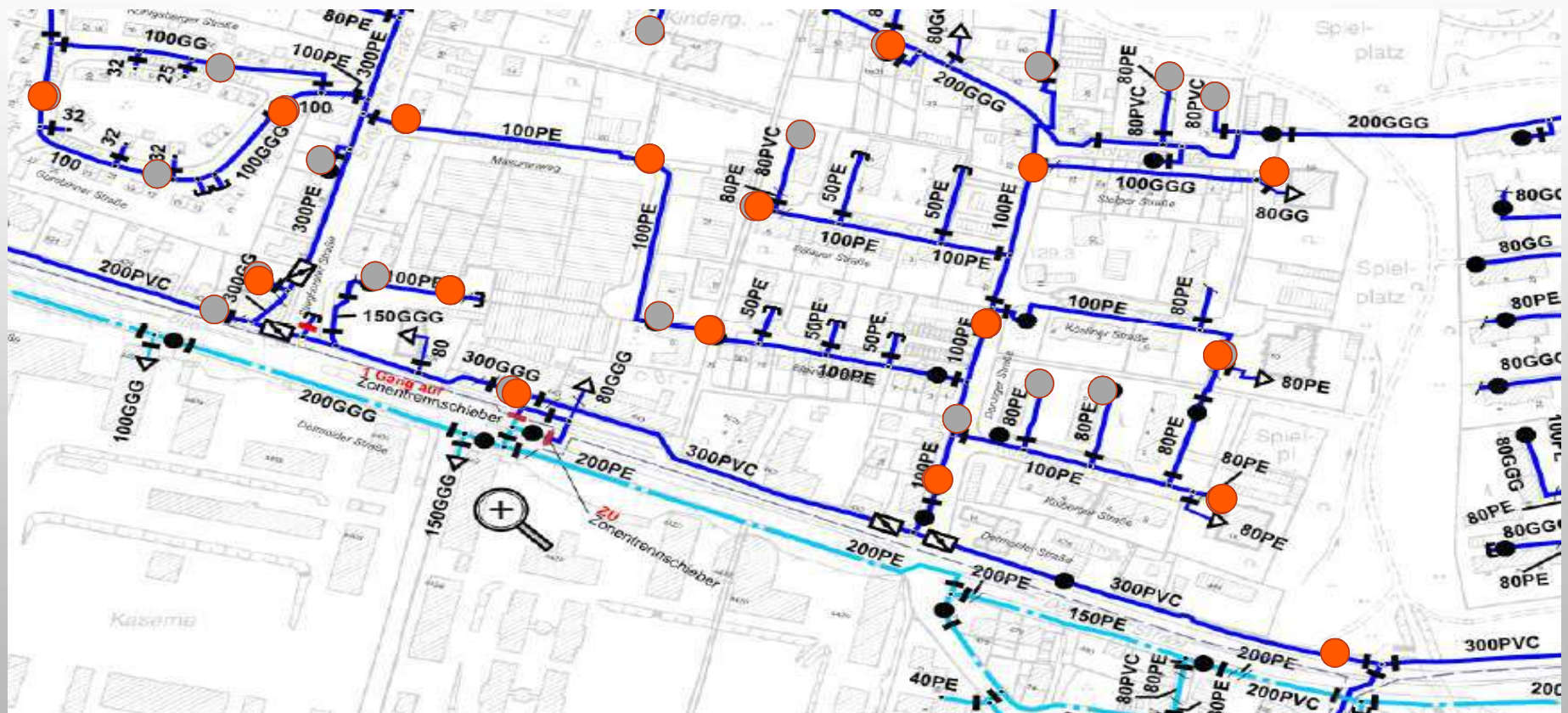
STATIONARY NOISE LOGGING

Example 2

A growing leak



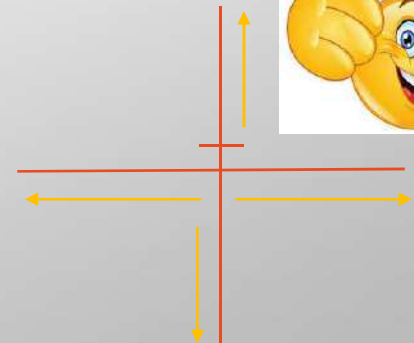
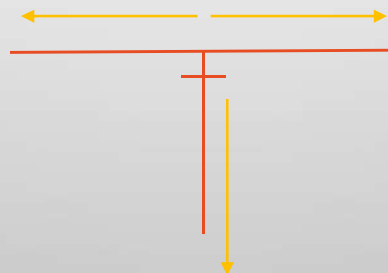
SEWERIN
Technologies for leak detection.



NOISE LOGGING

SELECTING MEASURING LOCATIONS FOR STATIONARY LOGGING

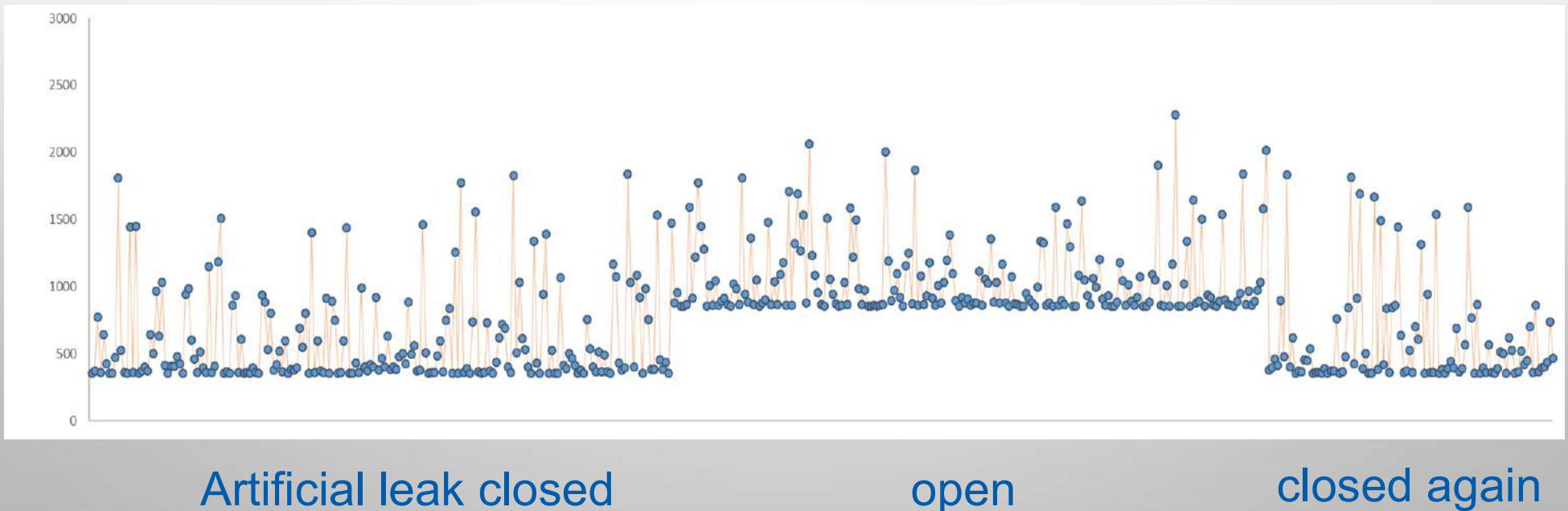
- HOW FAR CAN LOGGERS BE PLACED AWAY FROM EACH OTHER?
- THE DISTANCE BETWEEN TWO LOGGERS IS NOT THE BEST WAY TO PUT THIS QUESTION.
- THE BETTER APPROACH WOULD BE ASKING, HOW MUCH NETWORK EACH LOGGER CAN COVER.



NOISE LOGGING

SELECTING MEASURING LOCATIONS FOR STATIONARY LOGGING

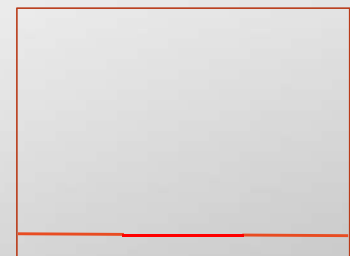
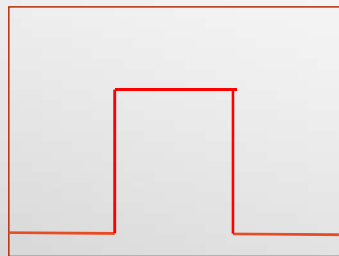
- HOW FAR AWAY FROM A LOGGER CAN A LEAK BE?
- MEASURING AN ARTIFICIAL LEAK



NOISE LOGGING

SELECTING MEASURING LOCATIONS FOR STATIONARY LOGGING

- HOW FAR AWAY FROM A LEAK MIGHT A LOGGER BE PLACED?
- MEASUREMENT IN THE NETWORK UNDER REAL CONDITIONS IS THE ONLY WAY TO FIND A REALISTIC ANSWER!



Detection distance



SEPEM® 351





LEAK DETECTION PIPE AND NRW LOCALIZATION

THANKS FOR YOUR ATTENTION