Innovative systems for forecasting and early warning of future flood incidents

BECAUSE EVERYONE HAS THE RIGHT TO HAVE CLEAN WATER!

zahnen TECHNIK

Our vision

About **2 billion people*** have no regular access to clean water!

Around **771 mio. people***, are without basic access to drinking water.

The contamination of water by **microplastics and other trace substances** is increasing.

BECAUSE **EVERYONE** HAS THE RIGHT TO HAVE **CLEAN WATER**!

What motivates us – what is our goal?

[1]Rohde, Tim (2023), Weltwassertag 2023: Fakten zu Wasserknappheit & Sauberkeit | UNICEF
[2]Das Umweltbundesamt (2023), Spurenstoffe in Gewässern | Umweltbundesamt

Our mission

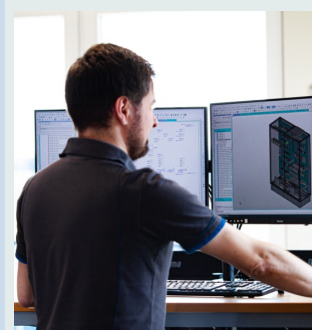**Mechanical engineering**

Electrical engineering

Process engineering

Digitisation

Standardisation

Zahnen Water Engineering Performance: Our core competences

Our mission

Plant Manufacturing by Zahnen
Decades of experience and expertise

ISO by Zahnen
Digital support from pre-planning to commissioning

Control Cloud by Zahnen
The smart water-, energy- and resource management system

Pure Water by Zahnen
Modular solutions for clean water

Service by Zahnen
24/7 service – inspections, maintenance and repairs

Zahnen Water Engineering Performance: Our services

Control Cloud®
by Zahnen

WATER MANAGER

Forecasting and early warning of future flood incidents

Flood incidents cannot be prevented.

but their impacts can be significantly reduced through early detection and warning

## How can we protect human lives?

Why is an early warning system important?

- Reasonable planning of the measuring points
- On-site survey of the given conditions
- Selecting the suitable measuring technology
- Selecting the suitable transmission technology
- Protection from vandalism
- Maintenance-friendly solution
- Reliable data center
- Clear visualization of processes
- Functioning alerting chains
- Artificial intelligence
- Avoid interfering with water and natural areas

Expertise of Zahnen Technik – We support you in the implementation of your early warning system

What does a high-quality early warning system need?
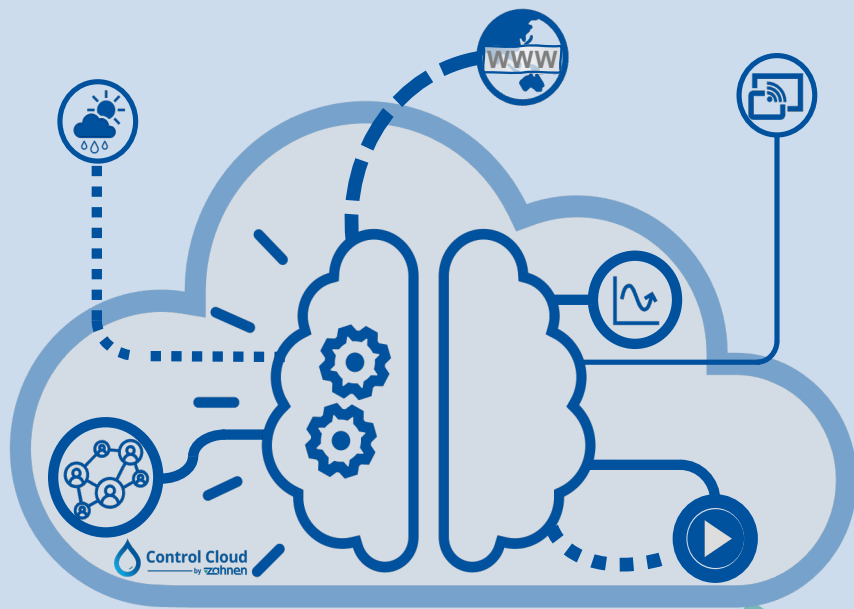
Intelligent water monitoring

&

Expertise of local hydrologists

Control Cloud
by zahnen

Comprehensive early warning system

Not just measuring – but taking the right action
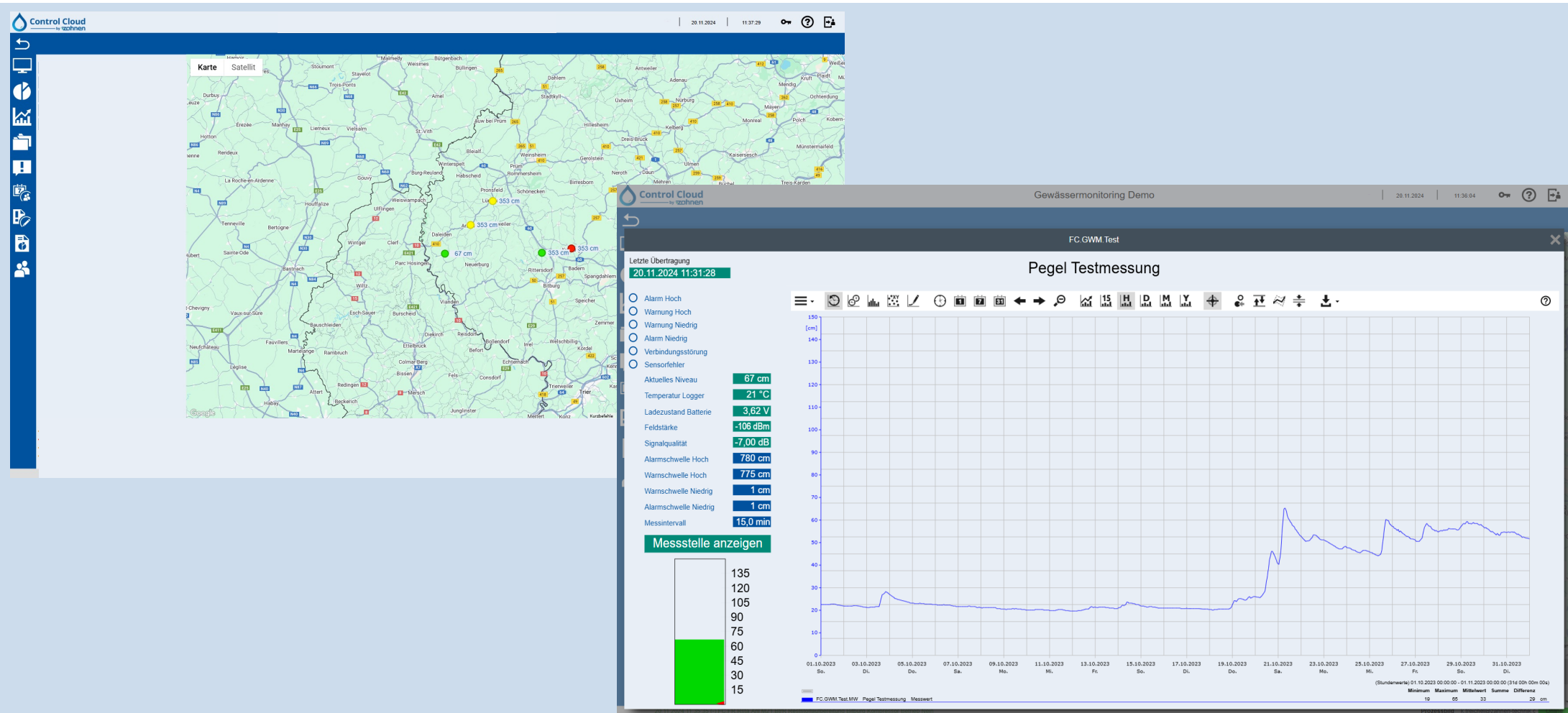
Clear visualization of processes – accessible anywhere

Forecast

Weather data

Visualization

Alerting

Measurement
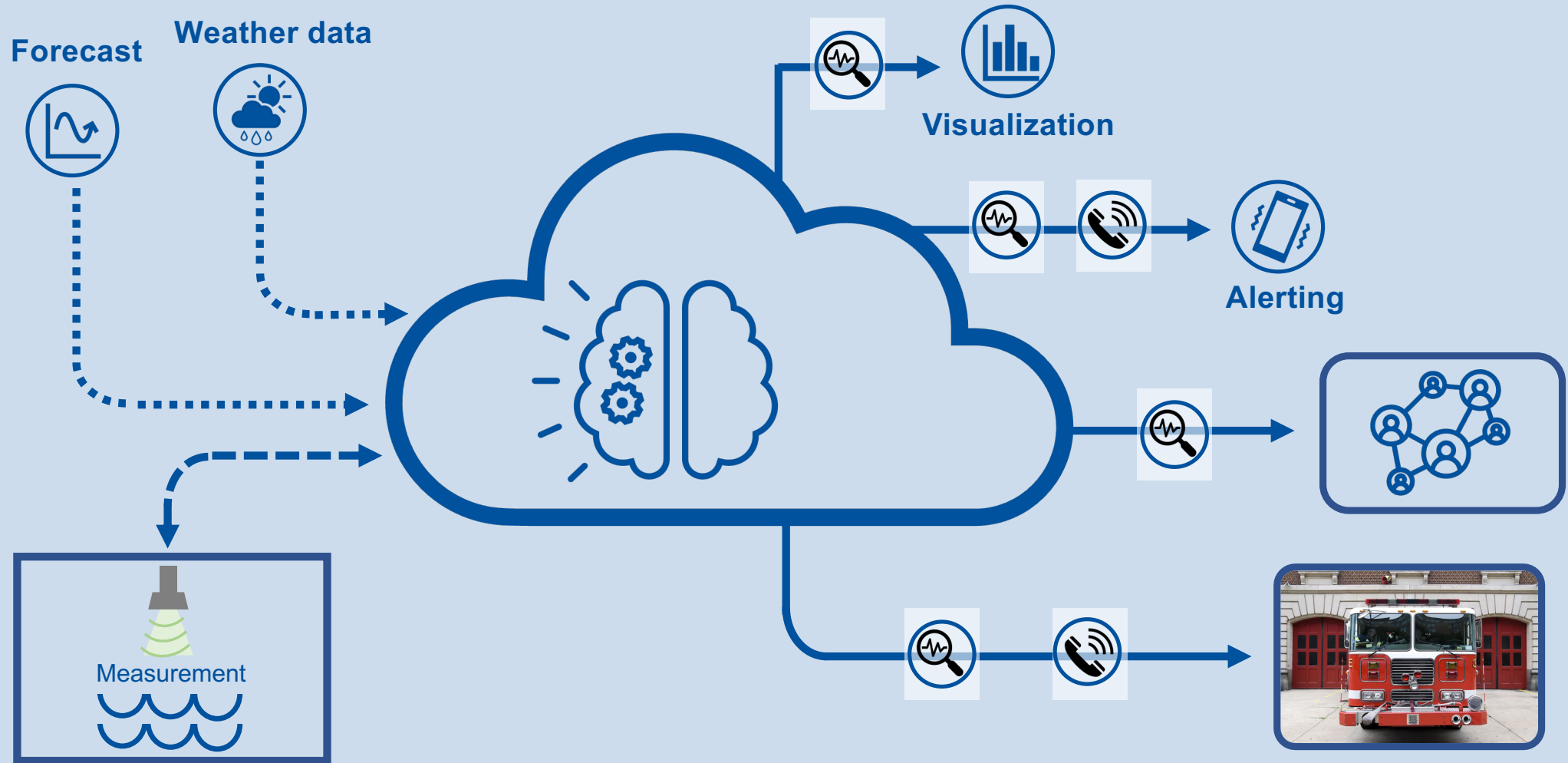
Reliable alerting chains

For forecasts, warnings and alerts with swarm intelligence

- Learns the behavior of the water level in the further course of the river
- Analyzes weather data and soil moisture values
- Outputs forecasts
- Limit value messages
- Adjusts measuring interval
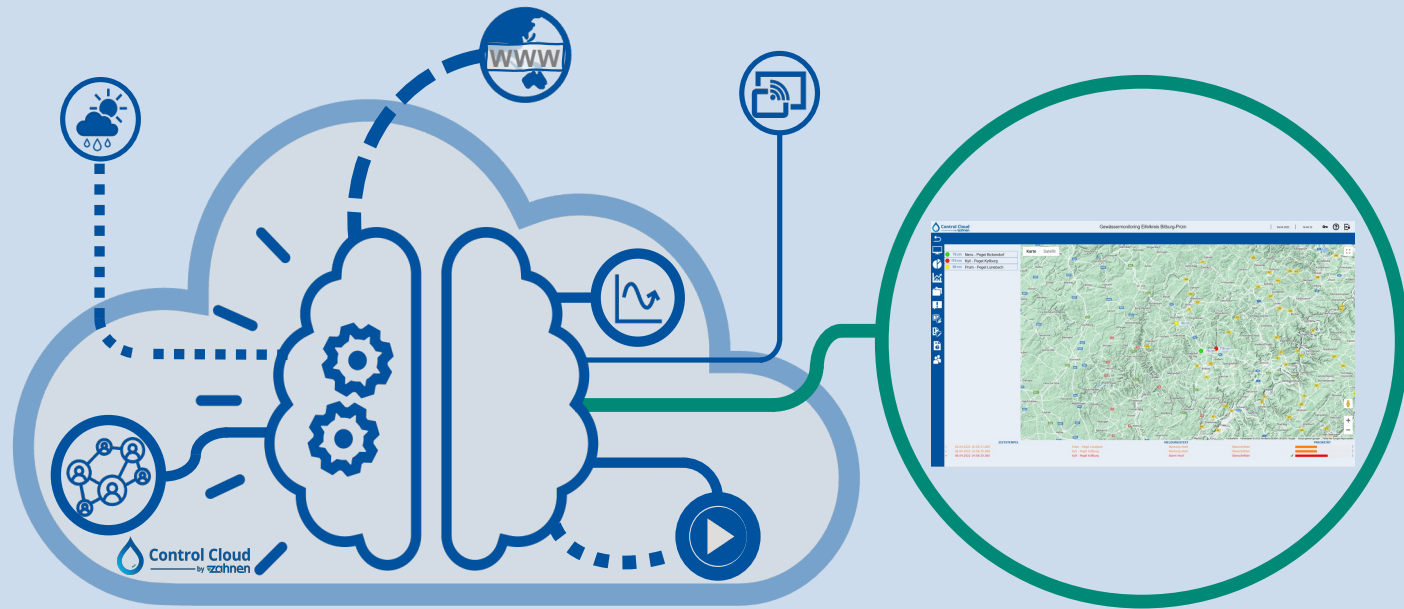
Intelligent water monitoring

Smart water monitoring - swarm intelligence

Water monitoring by zahnen

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Photos: Kathrin Kläsges Fotografie and Adobe Stock

www.zahnen-technik.de/en