

digital-water.city



Leading urban water management to its digital future

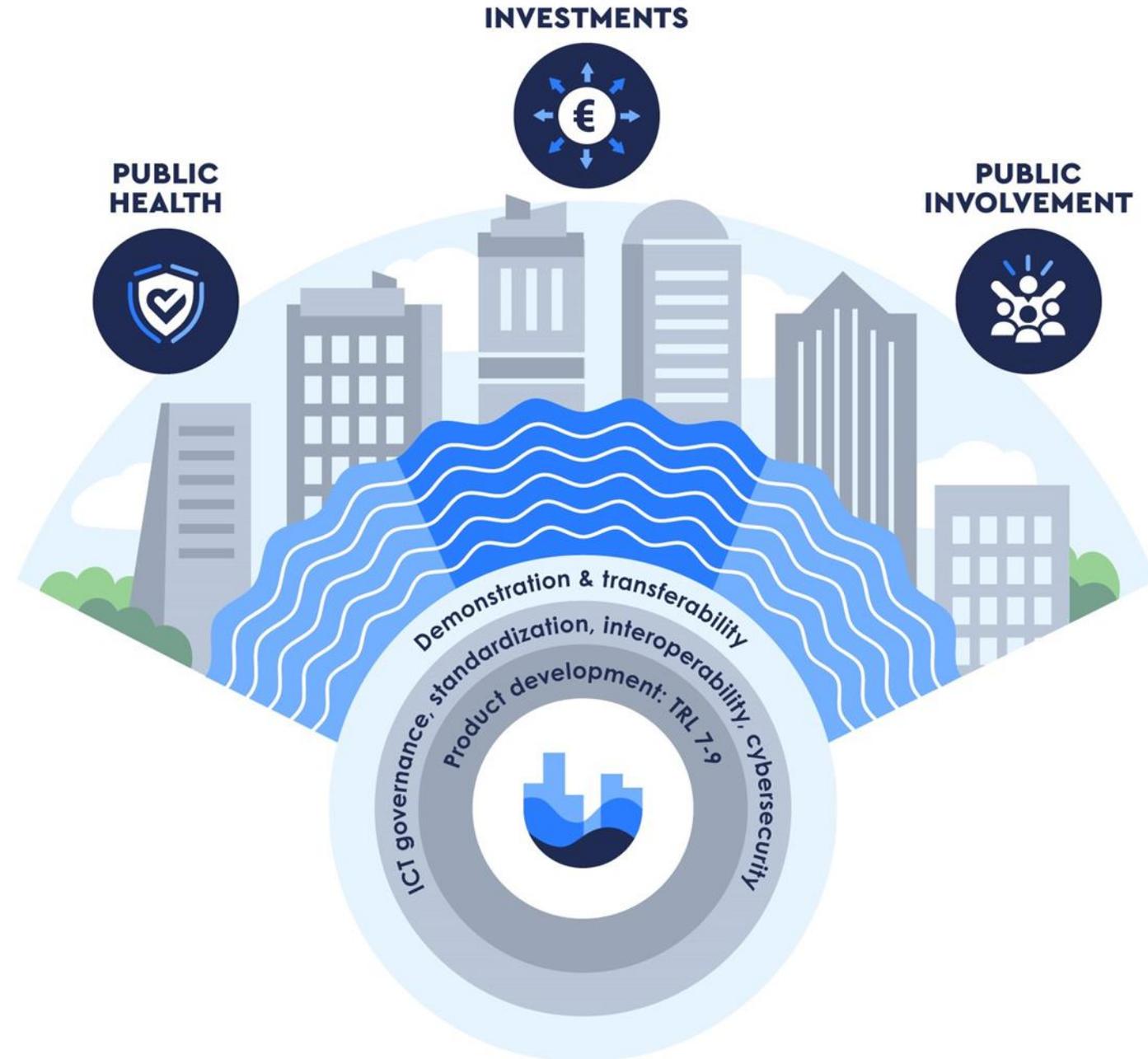
*H2020 innovation action | 5 M€ funding
2019-2022*

Nico Caradot

Kompetenzzentrum Wasser Berlin

Objective

Develop and demonstrate **15 advanced digital solutions** to address water-related challenges



24 partners

KOMPETENZZENTRUM
Wasser Berlin



Utilities

R&D

Companies and SME



5 cities > EU challenges

#Copenhagen

Flooding and
environmental impacts

#Paris

2024 Olympic games

#Berlin

Protection of river quality and
drinking water sources

#Milan

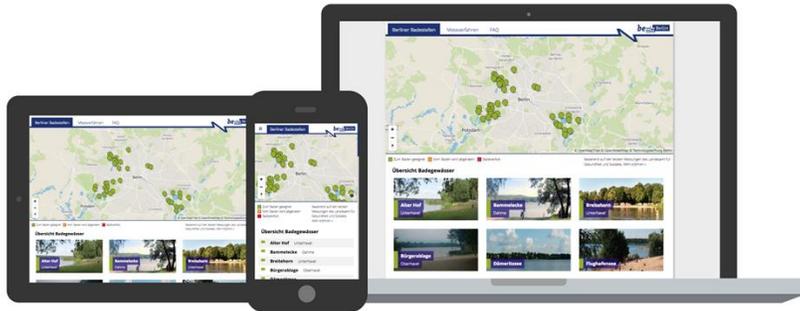
Safe water-reuse

#Sofia

ROI and operational costs

Bathing water

Early warning system to forecast bathing water quality and communicate with the public



Mockup: Technologiestiftung Berlin



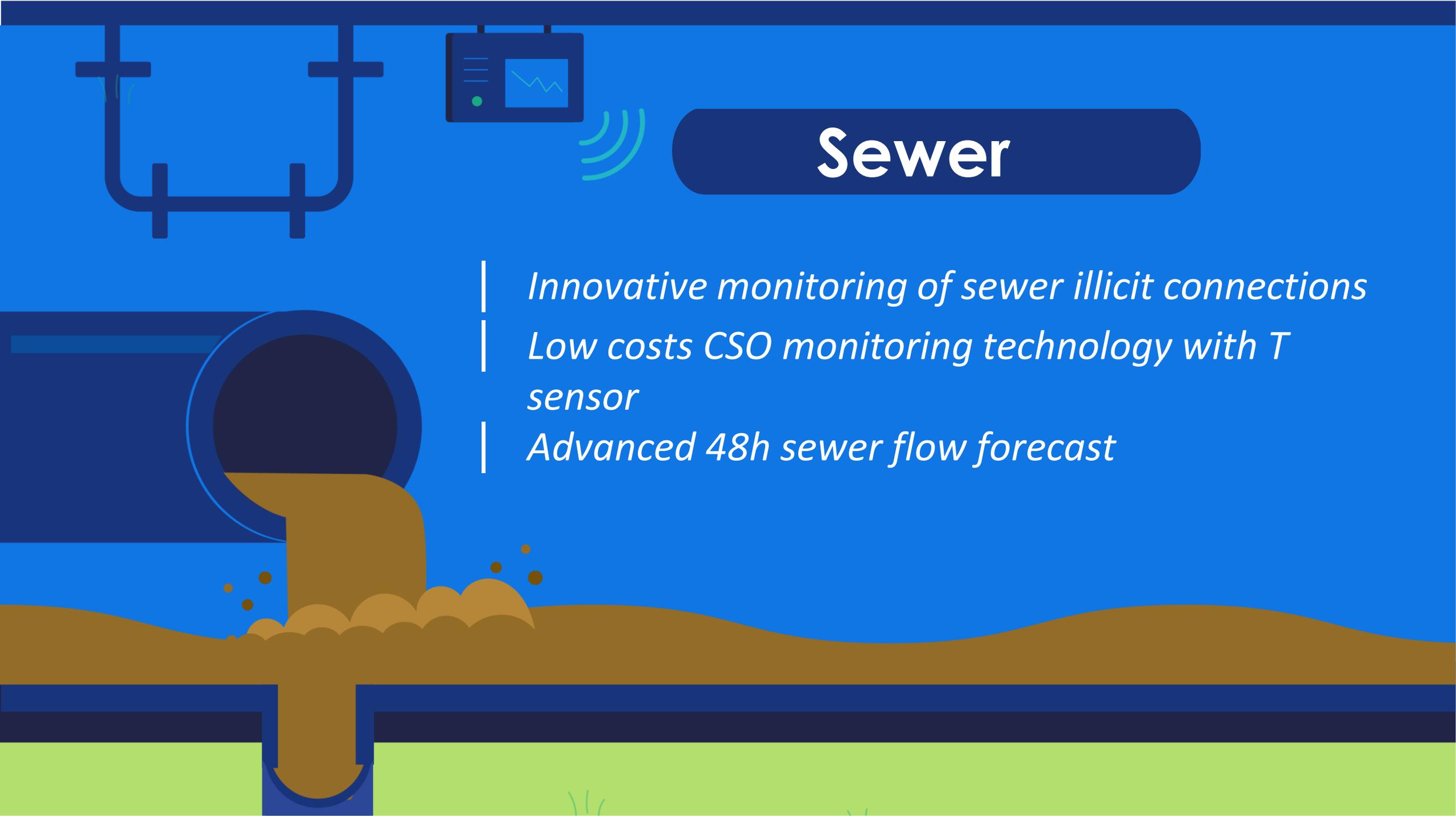
Real-time measurement of bacterial contamination



Drinking water

Predictive asset management of drinking water wells



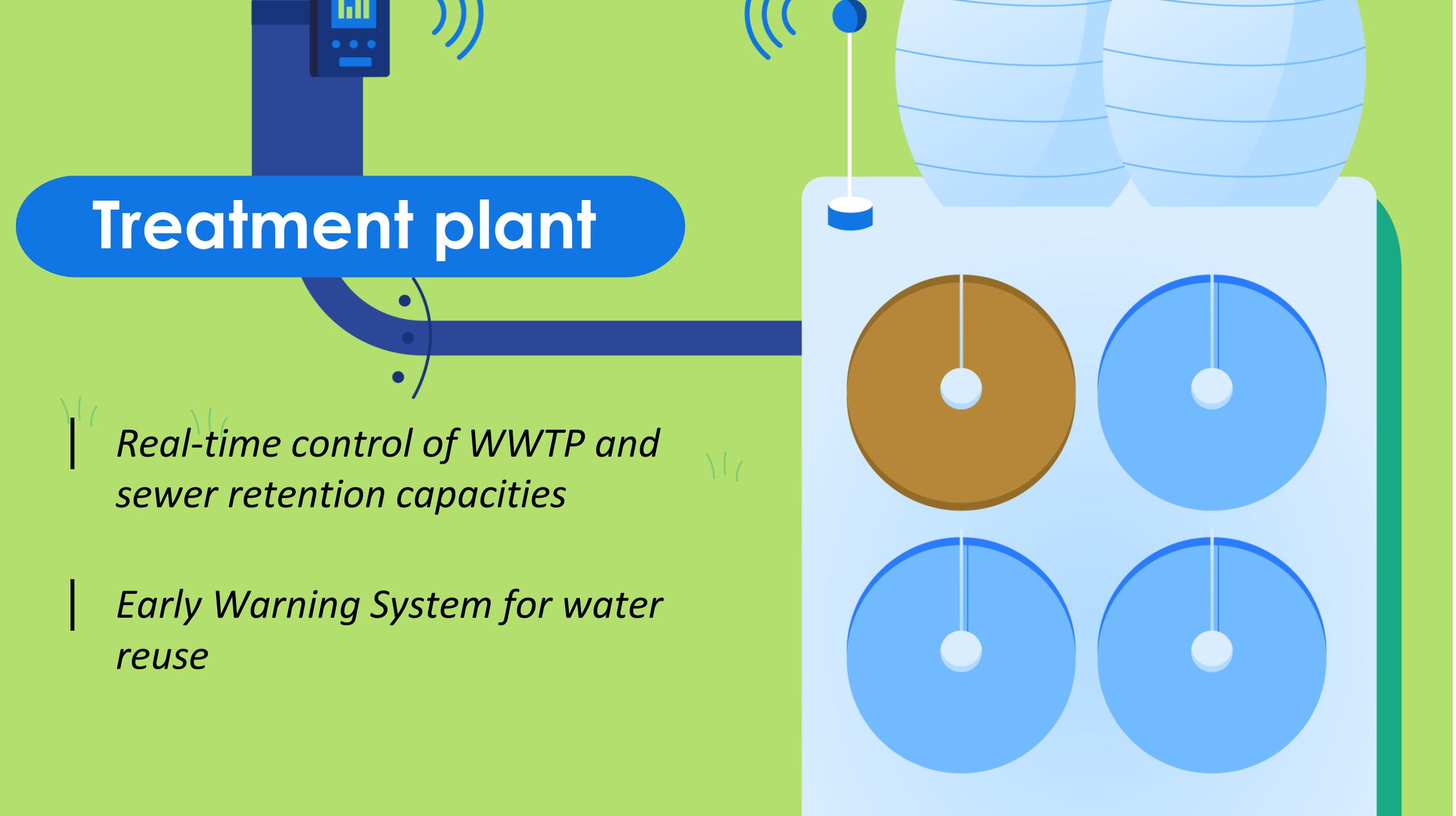
A stylized illustration of a sewer system. At the top left, a network of dark blue pipes is shown. To its right is a small grey device with a screen displaying a blue line graph and a green dot, with three green curved lines representing wireless signals. Below this, a large dark blue pipe enters from the left and discharges a thick, brown, bubbly stream of sewage into a larger, open-topped pipe. The sewage continues down a vertical pipe into a green area representing the ground. The background is a solid blue color.

Sewer

Innovative monitoring of sewer illicit connections

Low costs CSO monitoring technology with T sensor

Advanced 48h sewer flow forecast

The illustration shows a wastewater treatment plant. On the left, a dark blue vertical pipe leads to a control panel with a screen and buttons. A horizontal pipe extends from the control panel to the right. Above the pipe, there are wireless signal icons. On the right, a light blue rectangular structure contains four circular aeration tanks. The top-left tank is brown, while the other three are light blue. Each tank has a vertical line with a white circle at the bottom, representing an aeration system. Above the tanks are two large, light blue spherical tanks. The background is a light green gradient with some stylized grass icons.

Treatment plant

Real-time control of WWTP and sewer retention capacities

Early Warning System for water reuse

Water reuse



| *Remote monitoring of water stress*

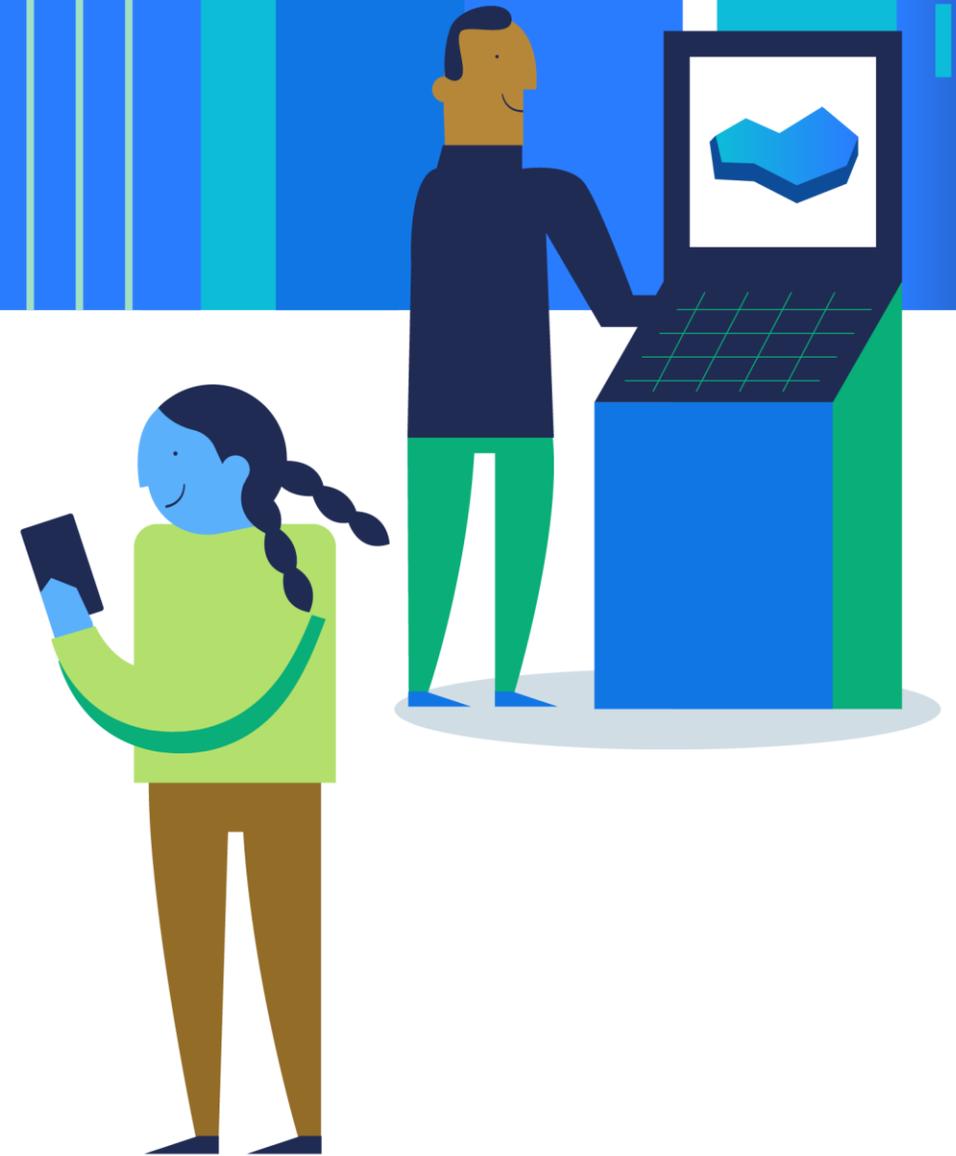
| *Match making platform to support water allocation*



Public involvement

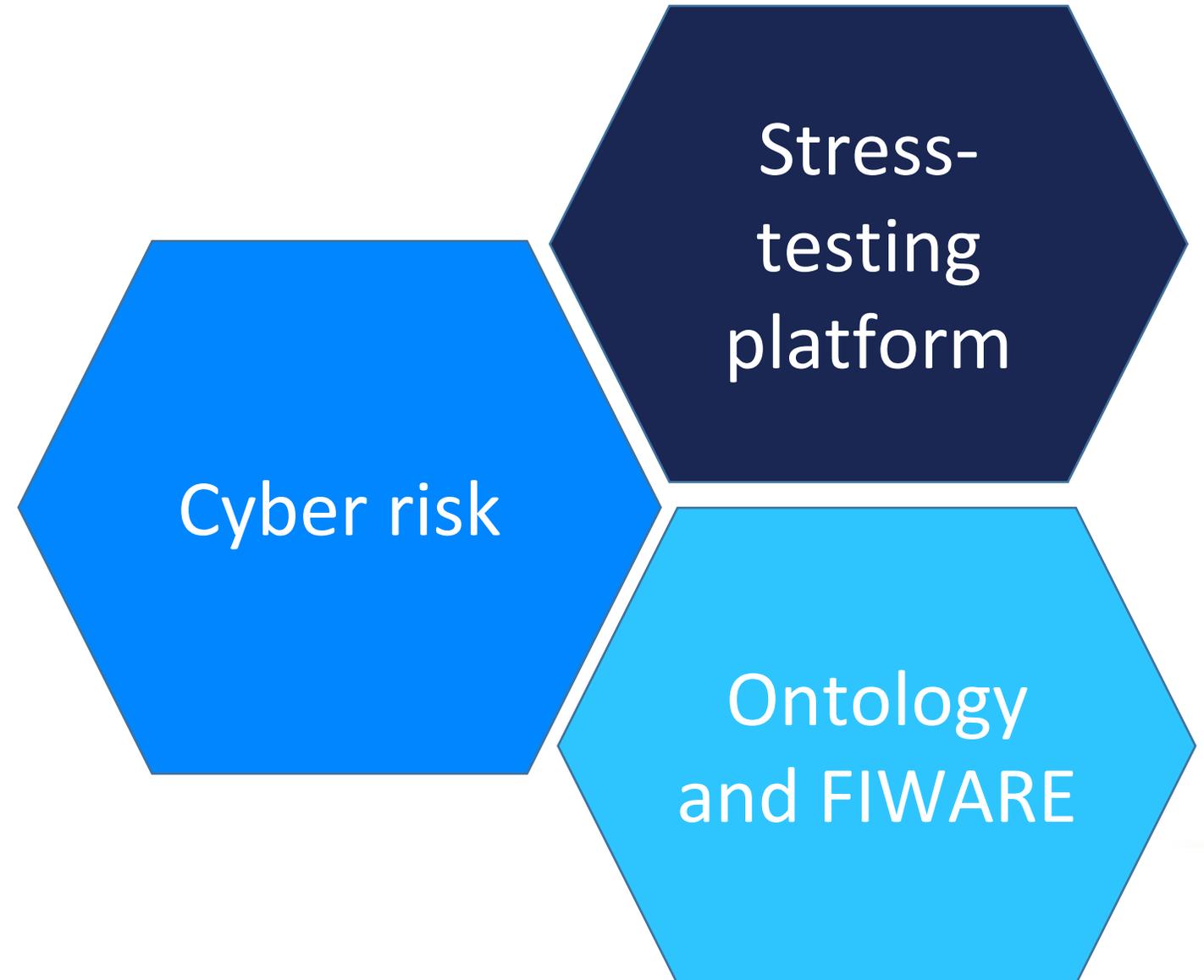
| *Augmented Reality (AR) app to communicate groundwater issue with the public*

| *Serious game to communicate the benefits of reuse in term of nexus*



Interoperability + Cybersecurity

The success of a digital solution does not depend only on the product itself but also on its **safe integration** into the utilities systems



DWC in few words

- Leverage the **potential of data and digital technologies**
- **Boost the water management** in 5 EU cities
- **Promote the value** of the digital solutions for the tech providers
- Achieve a **new step in the integration** of digital solutions in EU, in particular regarding cybersecurity, interoperability and governance

Focus on two cities



#Paris

2024 Olympic games

#Berlin

Protection of river quality and
drinking water sources

nicolas.caradot@kompetenz-wasser.de



digital-water.city is a research project supported by the European Commission under the Horizon 2020 Framework Programme

Grant Agreement No 820954

Duration: 01/06/19 - 30/11/22