

digital-water.city



Leading urban water management to its digital future

H2020 innovation action | 5 M€ funding

Project start: June 2019 | Duration: 3.5 years

Objective

- Create linkages between the physical and digital worlds
- Develop and demonstrate **15 advanced digital solutions** to address water-related challenges



Business activity

Groundwater and drinking water abstraction

~~Drinking water networks~~

Stormwater and sewer networks

WWTP and reuse

Surface water



24 partners

KOMPETENZZENTRUM
Wasser Berlin



Utilities

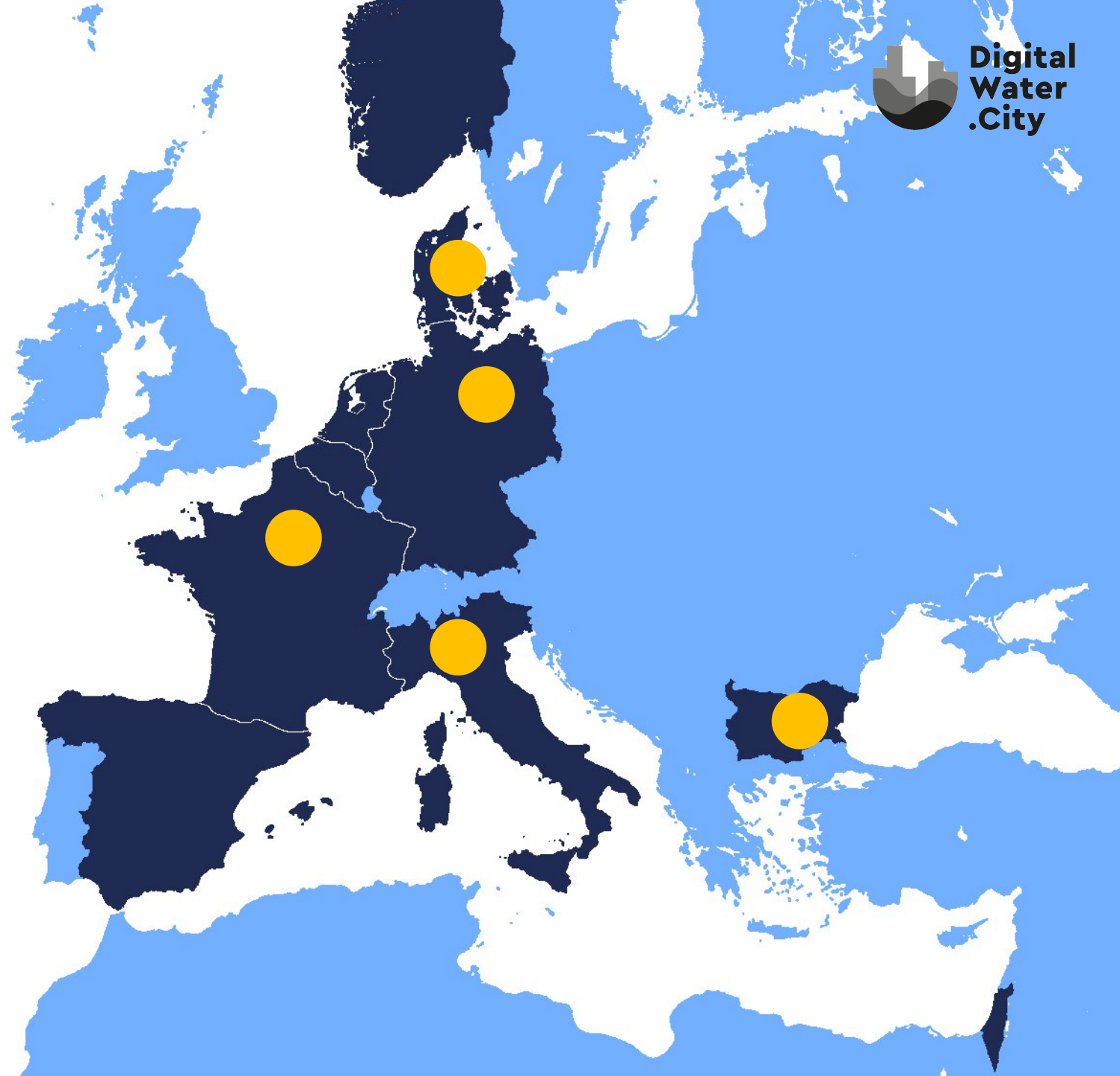
R&D

Companies and SMEs



5 cities

- Large scale assessment of the **benefits provided** by the digital solutions
- **Lighthouse to raise awareness** of other cities and accelerate **market uptake**



#Paris

Improve bathing water management in the river Seine for the Olympic games of 2024

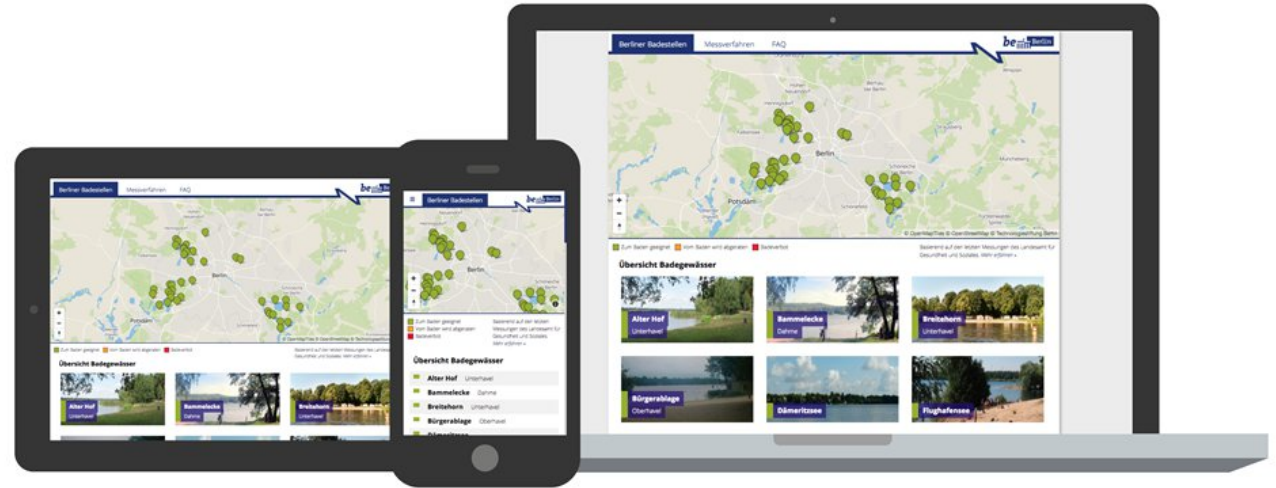


#Paris



© fluidion.com

Real-time measurement of bacterial contamination



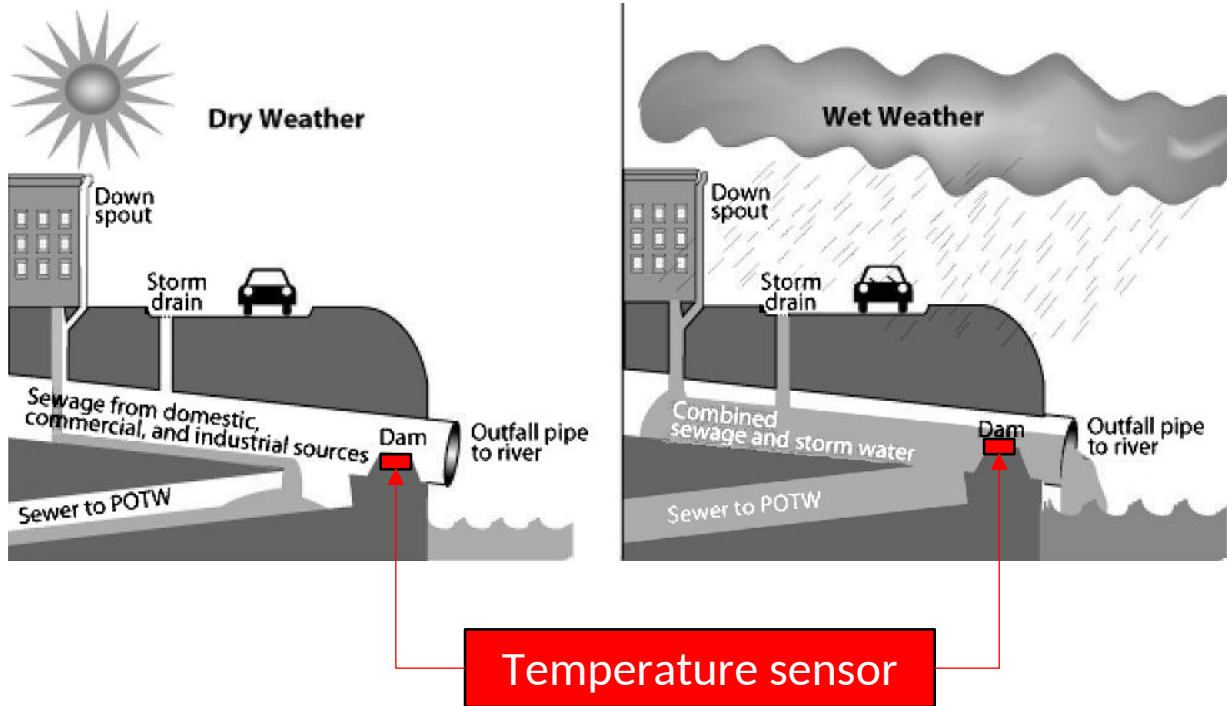
Mockup: Technologiestiftung Berlin

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

#Sofia

Optimize investments and reduce operational costs





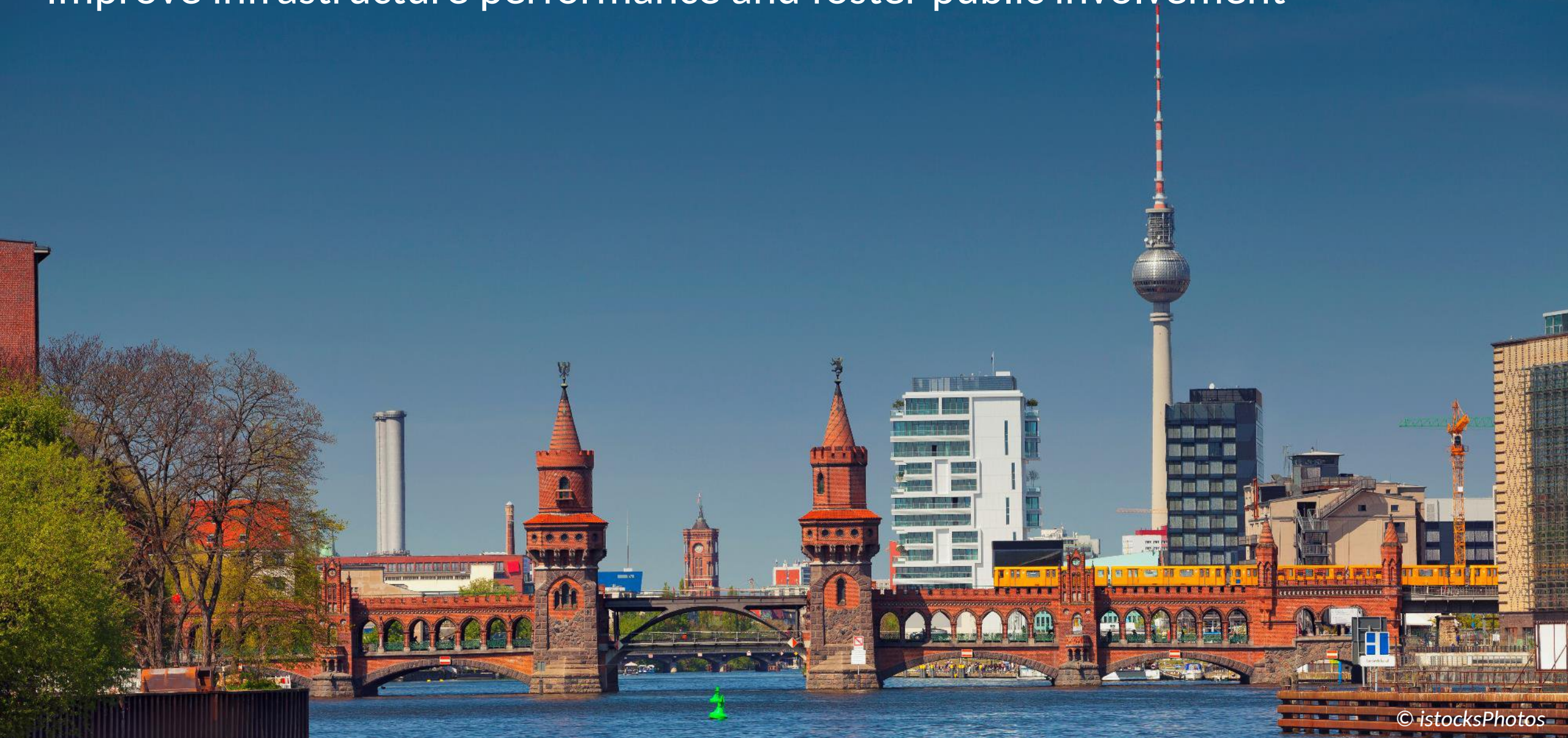
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| Low-cost CSO monitoring technology |
with T sensor

| Integrated solution for sewer
cleaning and inspection

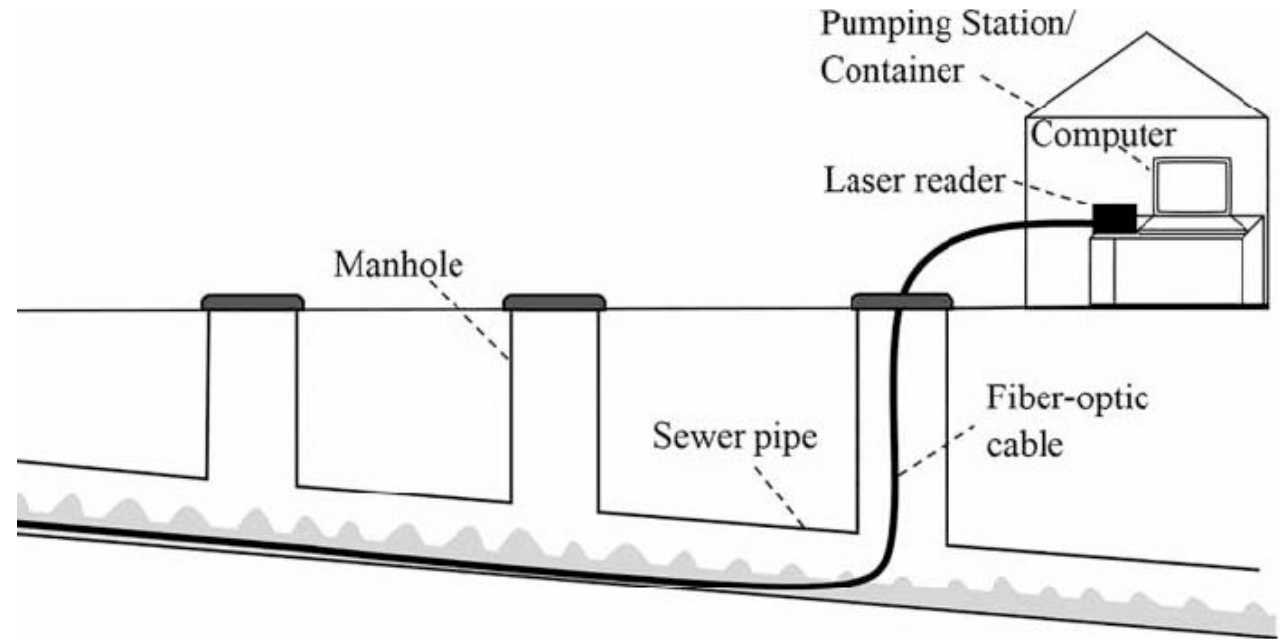
#Berlin

Improve infrastructure performance and foster public involvement

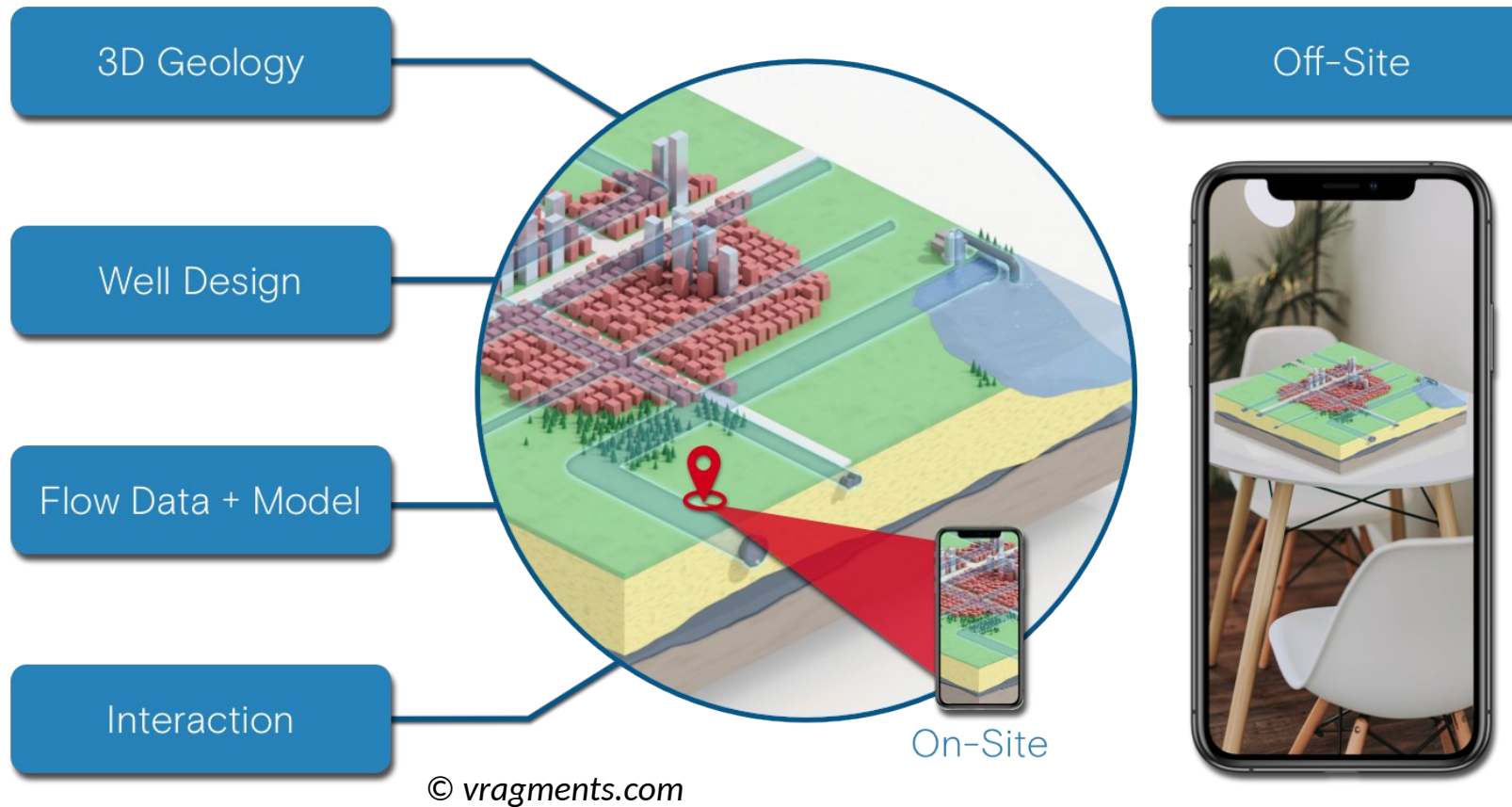




Predictive asset management of drinking water wells



Innovative monitoring of sewer illicit connections



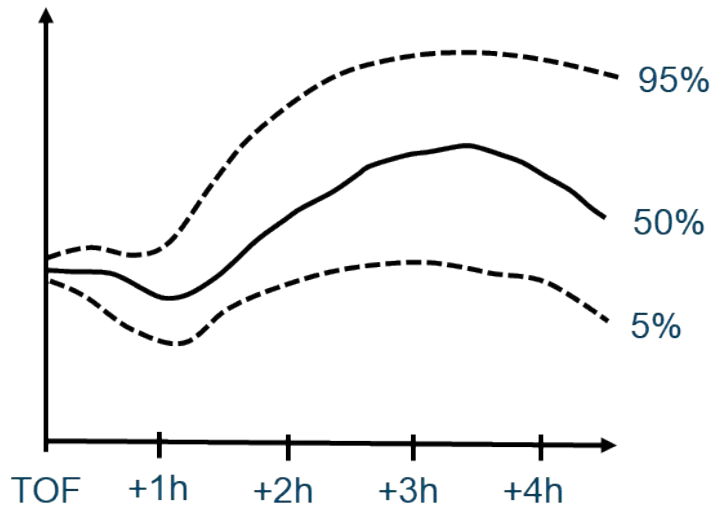
| *Augmented Reality (AR) app to communicate groundwater issue with the public*



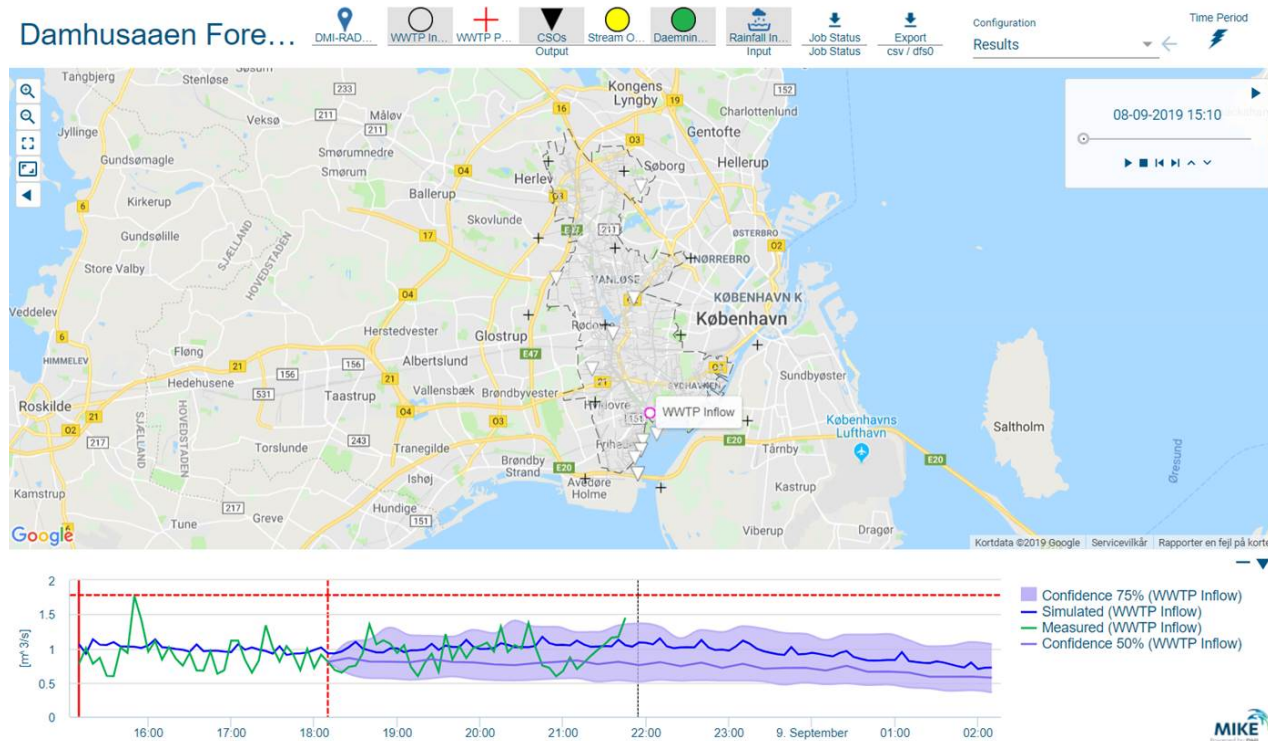
#Copenhagen

Reduce environmental impacts and flooding

#Copenhagen



Advanced 48h
sewer flow
forecast



Interoperability platform
for data sharing and
strategic decision making

Real-time control of
WWTP and sewer
retention capacities

#Milan

Achieve safe water reuse for agricultural irrigation +
Improve awareness on the nexus
energy-carbon footprint

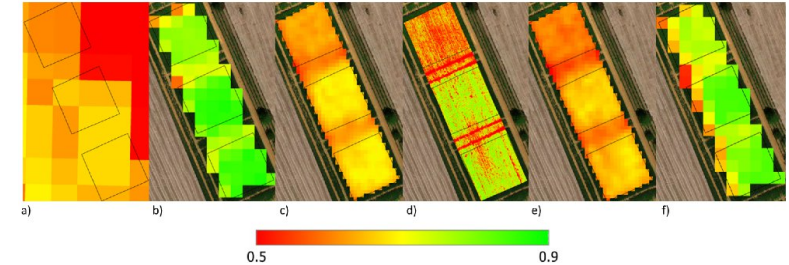




Early Warning
System for water
reuse



*Remote monitoring of
water stress*



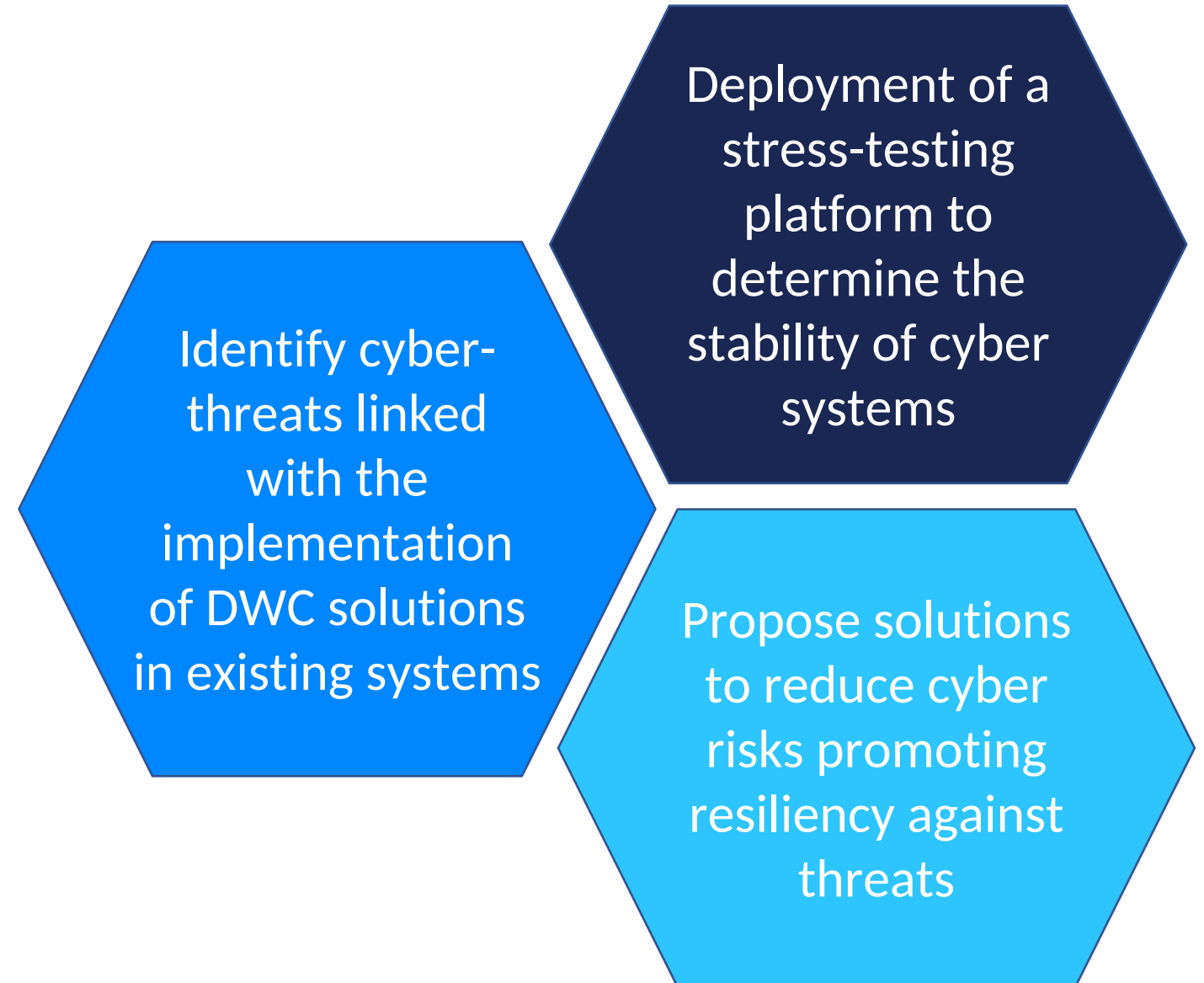
*Match making
platform to support
water allocation*

Improve awareness about the nexus

- Assess and communicate the **benefits of reuse in term of nexus**
- Real-time measurement of the **energy and carbon footprints** for cross domain audit linking WWTP effluents and agriculture needs
 - Contribution of each process to energy consumption
 - Emission of GHG including dissolved
- Serious game based on validated **real data** from the WWTP
 - Understand the link between water reuse, energy consumption and carbon footprint
 - Communicate with stakeholders and the public

Cybersecurity and interoperability

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



Community of practices

Creation of regular exchange platforms to **bring together** project partners and external stakeholders

5 x Local community

Integrate stakeholder expectations in product development + build trust

- Utility
- Tech provider
- External stakeholders

1 x Project community

Facilitate knowledge exchange between the 5 utilities to address transferability of the digital solutions

- 5 utilities
- Tech providers

DWC in a 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

Acknowledgement



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

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