

TOolkit for aDaptable, Resilient INstallations
securing high Quality drinking water

Coordinator: TU Delft

Water Innovation Europe- ICT4WATER cluster

June 21, 2023



Funded by
the European Union

At a glance: Objectives and concept

- To support the **implementation** of the revised **Drinking Water Directive (2023)**- *Risk-based management approach*.
- To enhance scientific and technical **knowledge** on drinking water quality protection monitoring, and treatment.
- Development and testing of a modular innovation toolkit called the “**ToDrinQ Toolkit**” , including:
 - ✓ Real-time **sensing** (including **soft sensors/AI**) and water quality **technologies**
 - ✓ Innovative **treatment processes** for adaptable/flexible water treatment plants (including the **design of small plants**)
 - ✓ Easy-to deploy **decision tools** and **platform**.



Aims and Demo Cases

- Improving the **design and operation** of water treatment plants,
- increase drinking water system **resilience**
- ensure **high-quality** drinking water, by
- minimizing **micropollutants, pathogens, and disinfection** by-products

5 Demo Cases



DEMO CASE 1
Amsterdam, Netherlands



DEMO CASE 2
Athens, Greece



DEMO CASE 3
Val de Bagnes, Switzerland

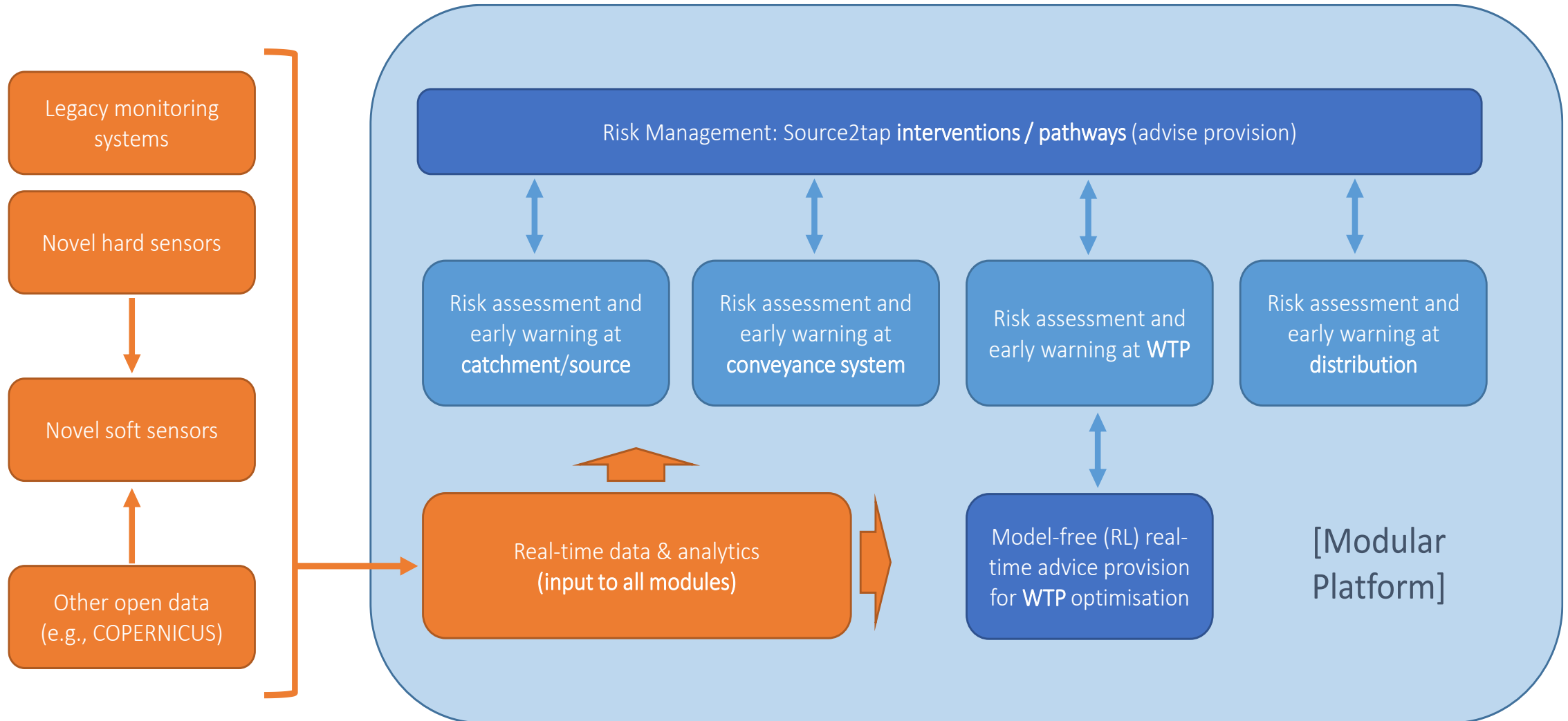


DEMO CASE 4
Beaune, France



DEMO CASE 5
Prague, Czech Republic

The integrated modular platform, data and workflow



Expected results:

- **Four** cost-effective water quality sensors and one **concentration/purification tool** to improve online monitoring of water quality from source to tap.
- **Ten** innovative soft sensors to measure unknown compounds in drinking water, improving situational awareness for treatment plants and distribution systems.
- **Two** advanced drinking water treatment processes offering cost-effective alternatives to conventional systems.
- Design-support tool for modular drinking water treatment plants to support the implementation of the revised Drinking Water Directive.
- Interoperable modular platform for monitoring and operational support, covering source water abstraction, conveyance, treatment, and distribution (**FIWARE compatible**).
- Extensive dissemination of ToDrinQ toolkit and knowledge base via **open access** repositories and **clustering** (ZeroPollution and ICT4WATER clusters)

THANK YOU



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[ToDrinQ_eu](https://twitter.com/ToDrinQ_eu)



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Key Facts: Budget, Dates, Partners



START DATE
01 December 2022



DURATION
48 months




BUDGET
3,994,479.75€


















PROJECT COORDINATOR
Delft University of Technology








Partners

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