



Co-UDlabs

**BUILDING COLLABORATIVE URBAN DRAINAGE
RESEARCH LABS COMMUNITIES**

IKT WORKSHOP

Urban drainage practice and research needs

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101008626

CO-UDLABS MAIN OBJECTIVE

- ◆ The main objective of Co-UDlabs is to build a collaborative European Urban Drainage innovation community.
- ◆ By providing a transnational multidisciplinary **collaborative research infrastructure network** that will allow the UDS community to come together, share ideas and co-produce project concepts.
- ◆ **Access to top-class research infrastructures** makes it possible to then develop, improve and demonstrate those concepts.
- ◆ Perform **harmonization of protocols** and test new ideas through joint research activities within the consortium

INFRAIA Starting Community

Build a network of Research Infrastructures on Urban Drainage Systems

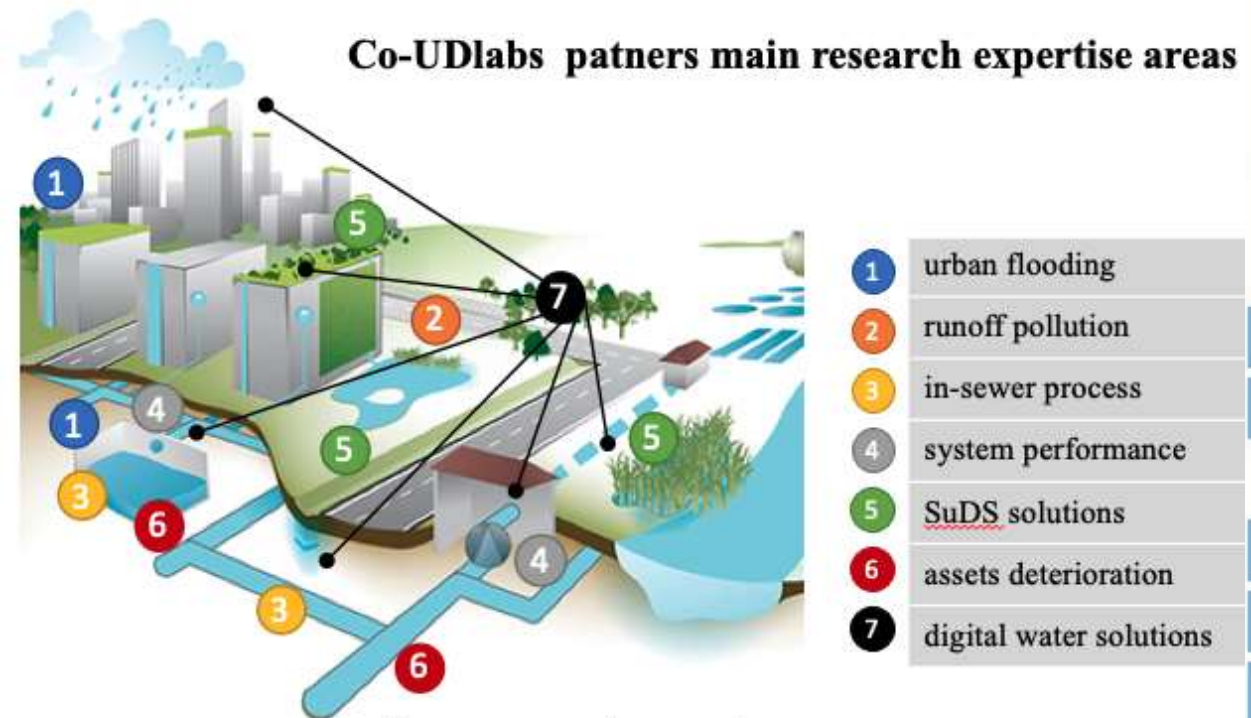
CO-UDLABS: THE CONSORTIUM



Role of Research Infrastructures

<https://co-udlabs.eu/access/research-facilities/>

- Co-UDlabs aims to be a **platform to exchange knowledge and data**
- UD community try to solve their problems at local-scale. An **European network of large research infrastructures is missing.**
- **Water utilities are traditionally cautious innovation adopters,** often requiring full or near-full scale testing of novel solutions prior to effecting widespread implementation

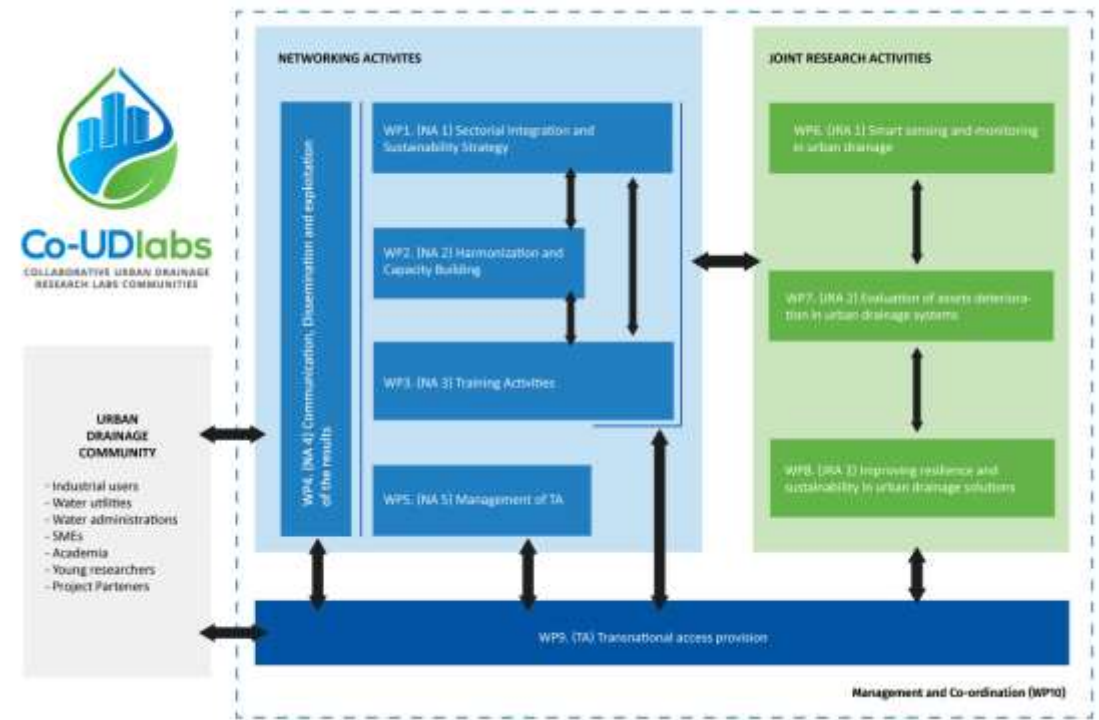


Background figure - <https://www.ctc-n.org/products/optimized-urban-drainage>

Co-UDlabs Structure

INFRAIA Starting Community

1. Networking Activities
2. Joint Research Activities
3. Transnational Access



Co-UDlabs NETWORKING ACTIVITIES

- **Not just communication and dissemination**
- **Engage UD community to define the role of RI in a more rapid transition to smart and sustainable urban drainage system management**
- **Free Training events:** for junior researchers and industry (hands-on):
 - [European Junior Scientist Workshop \(EJSW\) on UD monitoring](#) (15-21 May 2022)
 - Industrial workshop** on flow rate determination of pumping stations and hydraulic structure
 - Uncertainty assessment in UD monitoring data**

...

<https://co-udlabs.eu/networking/training/>

Co-UDlabs NETWORKING ACTIVITIES

Webinars

- Acoustic turbidity measurements (1st semester of 2022)
- Optical and computer vision techniques for flow and processes measurements (2nd semester of 2022)
- FTIR-chemical mapping (1st semester of 2023)
- Routine assessment of uncertainty in urban drainage data (2nd semester of 2023)
- Underground infrastructure state monitoring techniques (1st semester of 2024)
- Hydro-acoustic measurement techniques (2nd semester of 2024)

Youtube channel (2022)

<https://co-udlabs.eu/networking/training/>

Co-UDlabs JOINT RESEARCH ACTIVITIES

JRA 1. Smart sensing and monitoring in urban drainage systems

- Analyse sensors, communication technology and promising technologies for water quantity, water quality and asset inspection.
- Tools for online data validation and data fusion will be adapted to urban drainage sensors.

JRA 2. Evaluation of assets deterioration in urban drainage systems

- Deliver a harmonised and more generalised approach to the efficient repair and rehabilitation of sewer and drainage network assets.

JRA 3. Improving resilience and sustainability in urban drainage solutions

- Develop protocols and procedures to perform scalable hydraulic and water pollution measurements across the different facilities of Co-UDlabs
- A set of experimental tests will be performed to improve the evaluation resilience and sustainability of urban drainage conventional and new emerging nature base solution

Co-UDlabs Transnational Access

Free of charge Transnational Access – TA

Call for Proposals: free-of-charge access to Co-UDlabs' infrastructure

We are looking for **research proposals** aiming to solve practical problems of urban drainage systems using the **17 facilities** provided in the project.

The access will be provided **free of charge** and will allow diverse groups to work collaboratively on key challenges of the urban drainage sector, aiding a **faster and more effective uptake of innovative solutions**.

When?

- The Call will open on: **October 31, 2021**
- Share, connect and team up at the **Co-UDlabs Hackathon** on **November 23 and 25, 2021**
- The Call will close on: **January 31, 2022**

<https://co-udlabs.eu/access/ta-call/>

Co-UDlabs Transnational Access



Where?

7 locations in
7 European
countries

How?

We have two different modalities to access our network

In-Person Access

- 1 team member in the facility for the whole #TA duration
- 5 short visits
- #TA access for 15 to 60 working days

Partially-remote access

- Mid- and long-term performance tests
- 2 visits (start and end of tests)
- #TA access for 10 to 20 working days

- You can **learn all about our [Research Facilities](#)** on our website
- You can **request direct contact** with facility managers through our [facility contact form](#)

<https://co-udlabs.eu/access/ta-call/>

[TA Call Reference Manual](#)

Information of the facilities

<https://co-udlabs.eu/access/research-facilities/>

Documents for the call

Important:

[Facility contact form](#)

Co-UDlabs Transnational Access – Hackathon 23-25 Nov



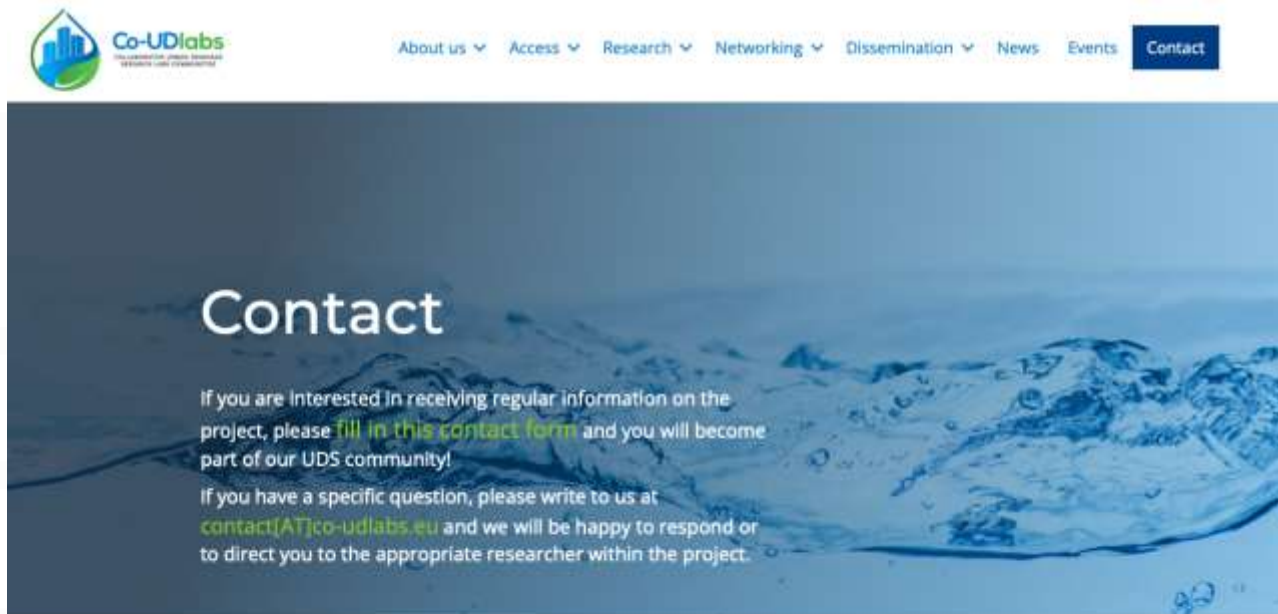
INFORMATION	PRACTICE	SCIENCE
Leave your name and e-mail address and organisational info (what can you offer) example	Practical problems to be addressed in Co-UDlabs example	Scientific questions to be addressed in Co-UDlabs example

You can find all information you need about the Hackathon [on this page](#):

- You can access the event's Guidelines [here](#).
- You can share ideas, expertise and concerns on the event's MiroBoard [here](#).
- Once all the homework is ready, you can register to Hackathon [here](#)!

More information

www.co-udlabs.eu



The screenshot shows the top navigation bar of the Co-UDlabs website with links for About us, Access, Research, Networking, Dissemination, News, Events, and Contact. The main content area features a large blue background image of water splashing. The word "Contact" is written in large white font. Below it, the text reads: "If you are interested in receiving regular information on the project, please fill in this contact form and you will become part of our UDS community! If you have a specific question, please write to us at contact@co-udlabs.eu and we will be happy to respond or to direct you to the appropriate researcher within the project."



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CONTACT FORM

To follow us on social media :



   contact@co-udlabs.eu



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