

IKT to take part in €4M Horizon 2020 project to build collaborative Urban Drainage research labs communities

IKT is taking part in a new 4 million euro Horizon 2020 project that aims to integrate research and innovation activities in the field of **Urban Drainage Systems (UDS)** to address pressing public health, flood risks and environmental challenges.



Co-UDlabs
COLLABORATIVE URBAN DRAINAGE
RESEARCH LABS COMMUNITIES

The EU's Urban Drainage Systems (UDS) have been valued at €2.5 trillion. They are **essential infrastructures** providing safe sanitation and drainage and environmental protection by collecting and then returning securely to the natural water bodies. Many UDS are **at risk**, their economic life is coming to an end. It is unclear how **limited knowledge** on their state and processes, population growth, climate emergency, untreated stormwater and public health threats caused by emerging pollutants and pathogens can be addressed, and how knowledge innovation and best practice is effectively shared. **Innovative approaches** are urgently needed to tackle these challenges, and **largescale laboratory facilities** are essential to investigate and validate new approaches and provide confidence in their **effectiveness and safety** before implementation in existing

UDS.

17 unique experimental facilities across Europe

Co-UDlabs (Collaborative Urban Drainage research labs communities) is a four-year project bringing together **17 unique 'field scale' urban drainage experimental facilities** hosted by seven research organisations in Europe: University of A Coruña (Spain), University of Sheffield (UK), INSA Lyon (France), Aalborg University (Denmark), Deltares (Netherlands), EAWAG (Switzerland) and IKT (Germany). The experimental facilities are designed for research across a range of disciplines, including **urban flooding**, runoff pollution, physico-chemical and biological in-sewer process, sustainable urban drainage systems (SUDS), performance analysis of urban assets, real time control and asset deterioration.



Co-UDlabs: Please klick on picture for a list of the participating organisations.

The main objective of Co-UDlabs is to provide **transnational access to these facilities** allowing stakeholders, academic researchers and innovators in the urban drainage water sector to come together, share ideas, co-produce project concepts and then benefit from access to top-class research infrastructures to develop, improve and demonstrate those concepts, thereby building a collaborative European Urban Drainage innovation community.

Creating a transnational research infrastructure

The transnational access to research infrastructures or installations is free of charge and includes the **logistical, technological and scientific support** as well as specific training: facility providers will provide free of charge support to access the research infrastructure (physical and knowledge-based) and to undertake **breakthrough engineering and scientific research and innovation** using multi-institutional and multi-sectorial teams. Local teams will help in the preparation of each visit and at least one research assistant and/or laboratory technician will be dedicated to the service of the granted projects. Expert scientific and technical staff will also support user groups during the visits. Accommodation and travel costs of user groups are also covered by the project.

Access to research facilities will be granted to selected applicants through two **calls for applications** that are planned to be opened in October 2021 and October 2023.

Interconnecting our large-scale urban infrastructure testing facilities, and actively create multi-sectorial teams will make it possible to support the take up of novel innovations, mitigating development risk and promoting transition to full scale living labs and urban systems.

Dr Anta Álvarez, the project coordinator at the University of A Coruña (Spain)

IKT is delighted to be part of this important opportunity to co-create better **innovative products** tested at the full-scale level, supporting the EU's drive to deliver a more **knowledge-based economy** as well as improving performance of its own urban water infrastructure.

For **more information** on the project, please visit the Co-UDlabs website, and follow @CoUDlabs on Twitter or Co-UDlabs on LinkedIn.

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