



CO-UDLABS AND COLLABORATION - BRINGING SCIENCE, INDUSTRY AND NETWORK OPERATORS TOGETHER

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Ways of cooperation between network operators, industry and science – experiences of IKT

The role of the network operator using the example of practical research projects of IKT

- 1) network operators/owners (Municipals, Water companies..) **identify problems and define the topics**
- 2) Network Operators **project steering committees** monitor and support research projects: e. g. select products and innovative technical solutions to be assessed, specify the boundary conditions for the laboratory and in-situ tests, are informed at first hand on the latest results and developments at regular intervals



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The role of the network operator using the example of practical research projects of IKT

3) Network Operators/owners make **construction sites** available for in-situ tests

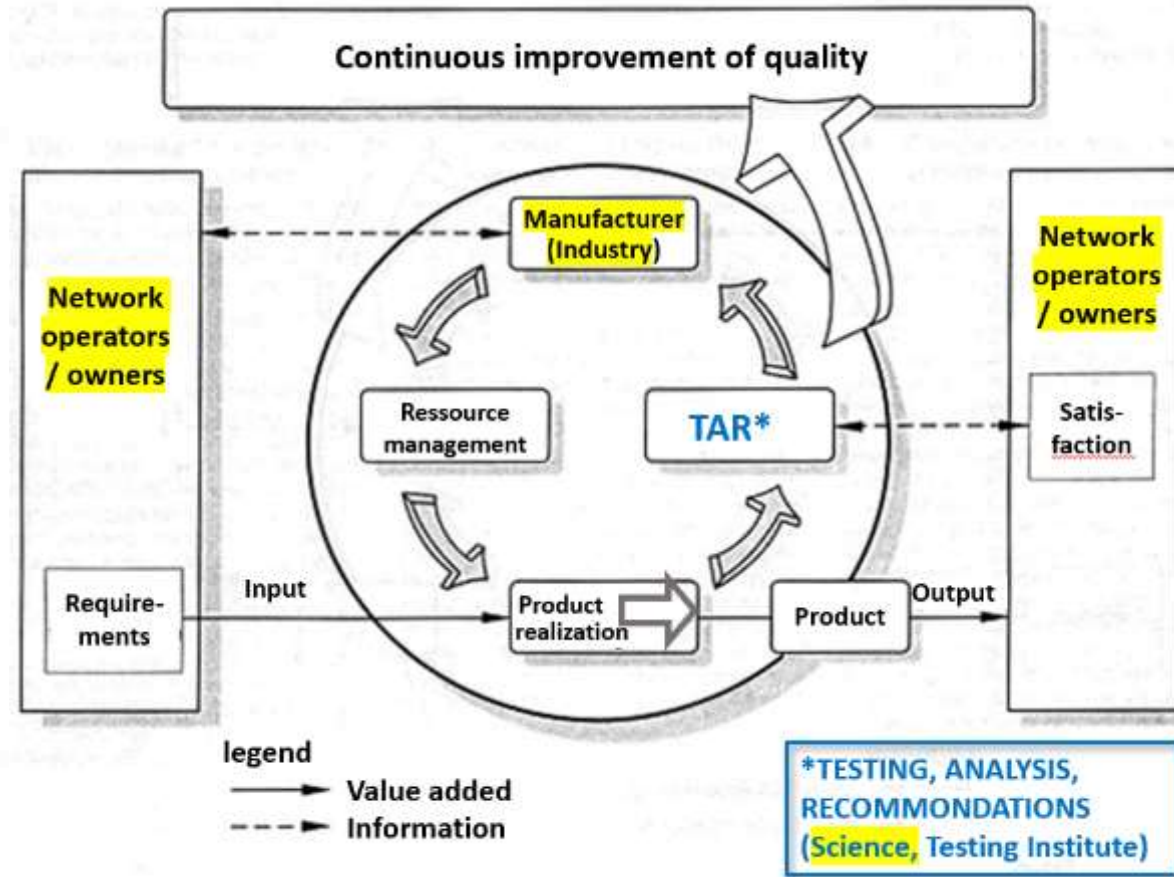


=>**Advantages:**

- Ensuring practical relevance of products and solutions
- Finding solutions to problems, not problems to solutions
- Implementation of research results in pilot projects
- knowledge gain for Network Operators through direct participation (not everybody is reading a 200 page report)

Ways of cooperation between network operators, industry and science – experiences of IKT

The role of the Industry, interacting with science and network operators/owners using the example of IKT Comparative product tests (Research projects)



Ways of cooperation between network operators, industry and science – experiences of IKT

Example: The IKT Comparative Product Test „Repair methods for waste water pressure lines (rising mains)“ – a research project funded by Ministry of Environment of Northrhine-Westfalia and some German network operators/owners

- 1) **background:** How to repair in view of difficult boundary conditions associated with waste-water pressure lines? Performance of marketable trenchless repair methods? Recommendations?



damages



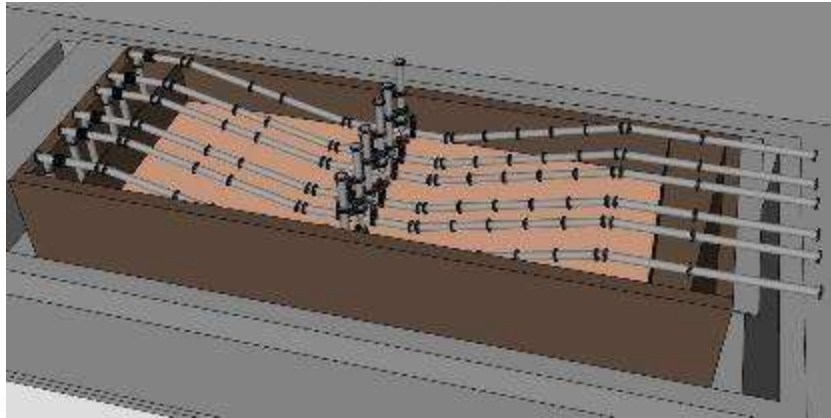
trenchless repair methods: CIPP, cement-mortar

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Example: The IKT Comparative Product Test

„Repair methods for waste water pressure lines (rising mains)“

- 2) **Objectives:** Obtaining neutral and independent information about the **performance of repair methods** => market transparency, reduce investment risk
Recommendations for quality assurance for the network operators
- 3) **Activities:** developing a 1:1 scale **test programme** (e. g. test setup with typical damage scenarios), **market review**, selecting 8 products and **testing** (lining systems)



Large Testing Facility (LTF)
LTF test setup (3D-plan)



LTF test setup



Installing products

Ways of cooperation between network operators, industry and science – experiences of IKT

Example: „Repair Methods waste water pressure lines“: who is involved?



Project participant	urban drainage - stakeholder	Task
Ministry of Environment Northrhine Westfalia (MUNLV)	Legislator	funding
State Environmental Agency (LANUV)	Water Monitoring Authority	steering committee
Bezirksregierung Münster	Local Water Monitoring Authority	steering committee
City of Bottrop, City of Cologne, City of Bremen, City of Iserlohn, City of Bremen, City of Voerde, Municipality Burscheid, Wupperverband, Emschergenossenschaft	Network Operators and Owners: Municipals, Wastewater Utilities, Water Board/Association	funding, steering committee, provision of in-situ-measures
product providers	Industry	provision of products
IKT	Science (practical)	project management, developing test programme, testing products
other scientific institutions and experts (e.g. universities)	Science (basic)	special issue on basic scientific questions

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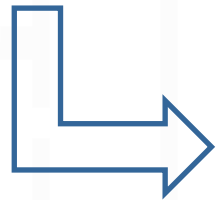
=> Every stakeholder is involved!

Ways of cooperation between network operators, industry and science

– “trans-national access” experiences of IKT

Example: The IKT partner project „Rising Main rehabilitation“ (UK/IRL ⇔ GER) of the main project IKT Comparative Test, "Repair methods for waste-water pressure lines (rising mains)"

=> further UK/IRL specific questions are taken up, e.g. other damage scenarios, CIPP-products of the British market (based on experience of UK/IRL water companies) => founded by a group of UK water companies



**Co-Udlabs, Transnational Access:
possibility to use the LTF test setup**



Discussing test setup with German steering group



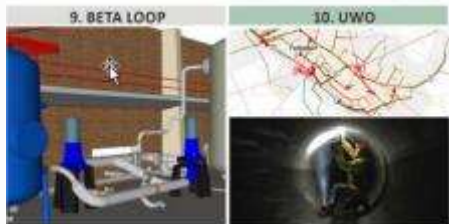
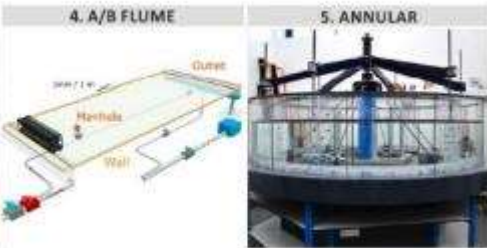
Damage scenarios – steering group voting



LTF Test setup

Ways of cooperation between network operators, industry and science

– “trans-national access”: chances and challenges within Co-UDlabs



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