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Water Data Infrastructure for Next-Generation e-Water-Services in Flanders

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Efficient sharing of water data and services (e.g. models, tools) is a challenging task. Several EU projects (e.g. DRIHM) already investigated some of the bottlenecks. In a new project, we investigated several issues to establish a Water Data Infrastructure for e-Water Services in Flanders. Important features of such a WDI deals are

- Institutional arrangements
- agreement around technology and standards
- agreement about dissemination of water related data and tools

The goal of the WDI is to get to one (distributed) environment with models, data and tools for professionals, scientists and citizens to analyse data and run (the latest state of the art) models without (direct) interaction with the providers and developers of these data, models and tools.

In the project, a WDI architecture was developed and proposed based on the developed WDI principles. The WDI principles and architecture were tested and demonstrated with 3 proof of concept (where execution of a lumped and distributed hydrological model and hydraulic models, running and visualisation were distributed over the infrastructure of the different projectpartners). We will present the WDI principles and architecture and its implementation for 3 use cases (operational, policy and on the fly modelling of accidents, e.g. spill). Results of the proof of concepts will be shown. It was found that institutional arrangements are the biggest hurdle for implementation of such a WDI.