

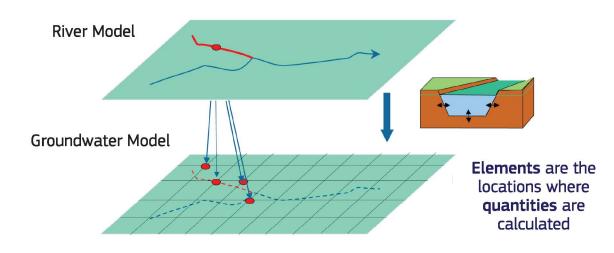
Demonstration of integrated modelling in the Scheldt River Basin, using the OpenMI

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What is the OpenMI?

OpenMI = Open Modelling Interface

An interface standard for run time data exchange between models, databases & tools (no matter what dimension / domain), through links defined by the modeller, whose purpose is to improve the ability to model complex scenarios.



Why apply the OpenMI?

Competition for scarce resources

Need for integrated water management - WFD

Complexity leads to need for decision support

Need for whole catchment models

Need for model linking

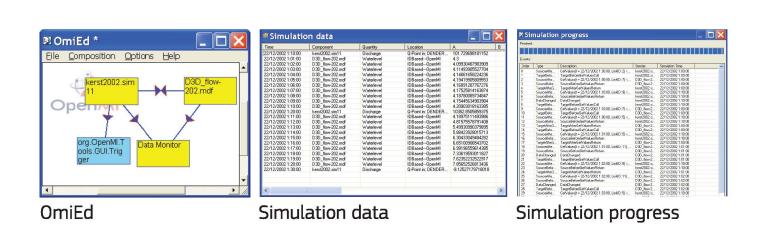
Climate change

Ecology

Fish

Groundwater

The OpenMI an example of linking

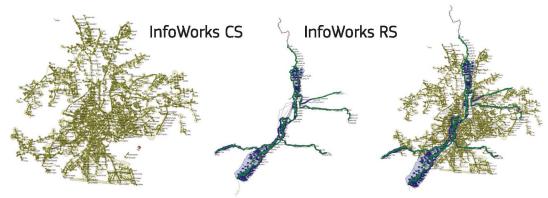


More information

- Concerning the LIFE project: http://www.openmi-life.org
- Concerning the OpenMI: http://www.openmi.org
- Gregersen J.B., Gijsbers P.J.A., Westen S.J.P., 2007. OpenMI: Open Modelling Interface. J. Hydroinf., 9 (3), 175-191.

OpenMI-LIFE demonstration: The River Scheldt

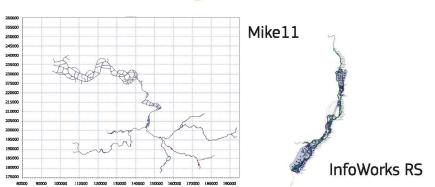
Use case A: linking a sewer model & a river model



Objective: optimise investments & operational strategies for water managers **Study case:** the City of Leuven & the River Dijle

Partners: Aquafin and VMM

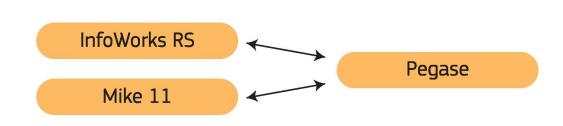
Use case B: linking a tidal model & a river model



Objective: improved flood maps & predictions **Study case:** the River Dijle & the River Scheldt

Partners: FH and VMM

Use case C: linking a river model & a water quality model

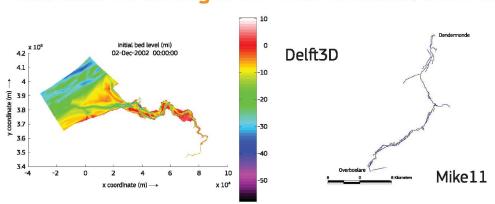


Objective: improve interaction between water quantity and water quality

Study case: the River Dijle & the River Demer

Partners: FH, VMM and ULG

Use case D: linking a 1D-river model & a 2D-tidal model



Objective: improved flood maps & accessibility for Antwerp Harbour **Study area:** the River Scheldt & the River Dender

Partners: FH and Deltares











