

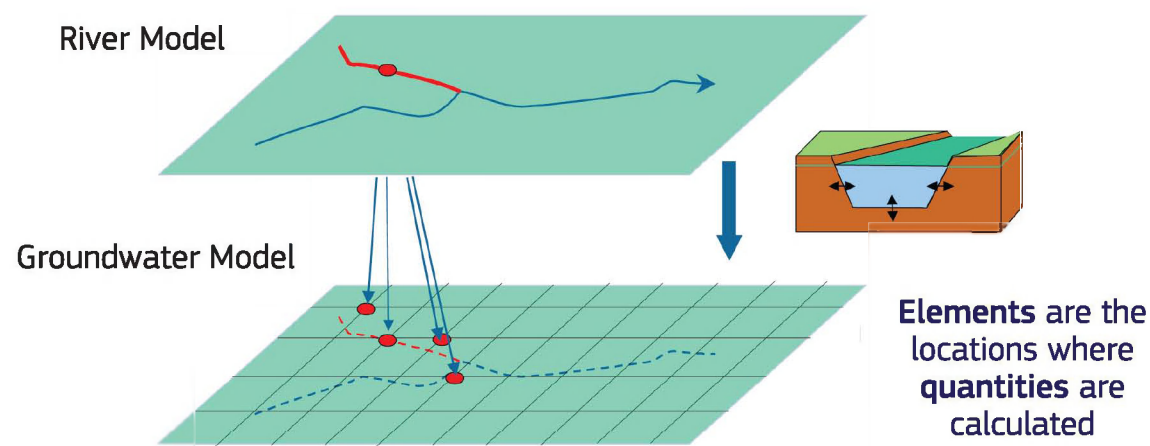


# Demonstration of integrated modelling in the Scheldt River Basin, using the OpenMI

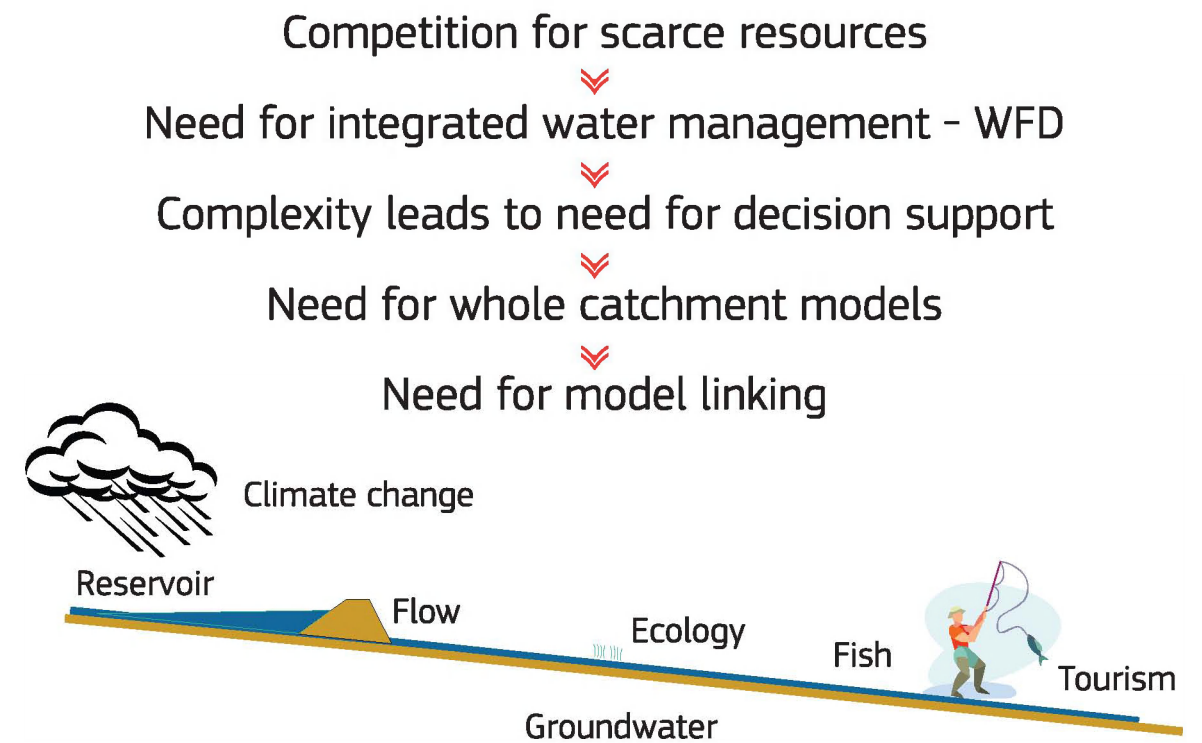
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## What is the OpenMI?

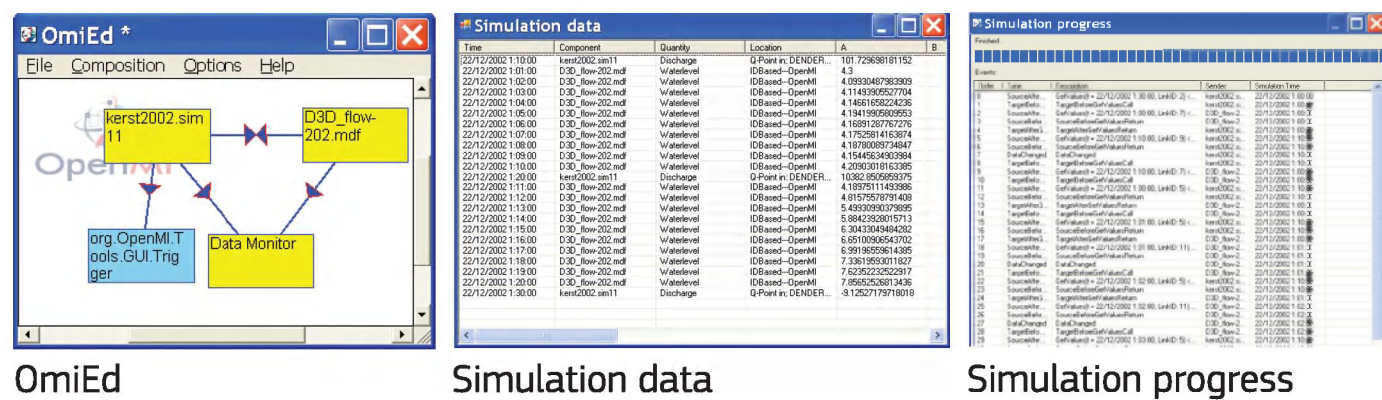
**OpenMI = Open Modelling Interface**  
An interface standard for run time data exchange between models, databases & tools (no matter what dimension / domain), through links defined by the modeller, **whose purpose is to improve the ability to model complex scenarios.**



## Why apply the OpenMI?



## The OpenMI an example of linking

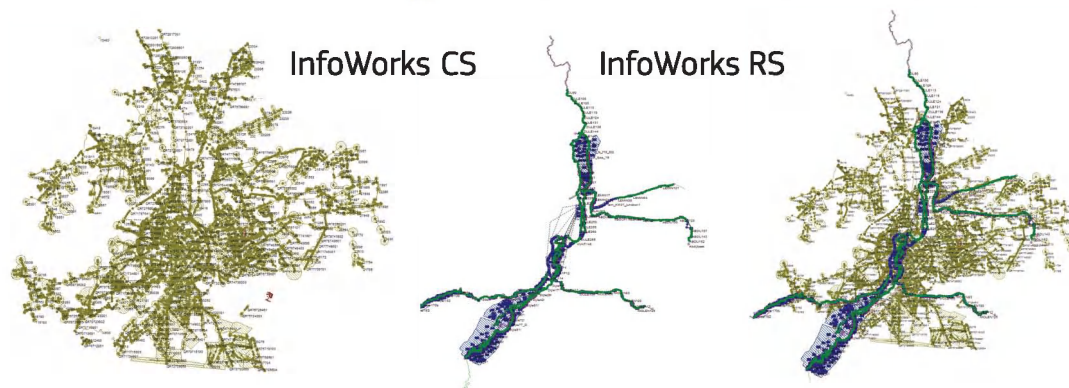


## More information

- 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.

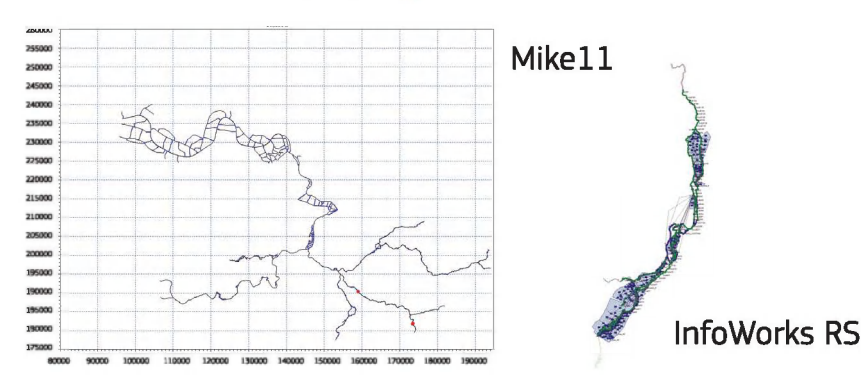
## OpenMI-LIFE demonstration: The River Scheldt

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



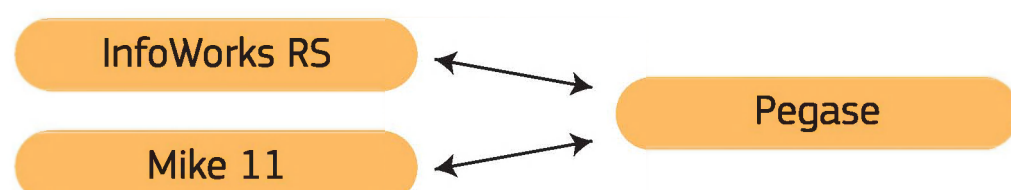
**Objective:** optimise investments & operational strategies for water managers  
**Study case:** the City of Leuven & the River Dijle  
**Partners:** Aquafin and VMM

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



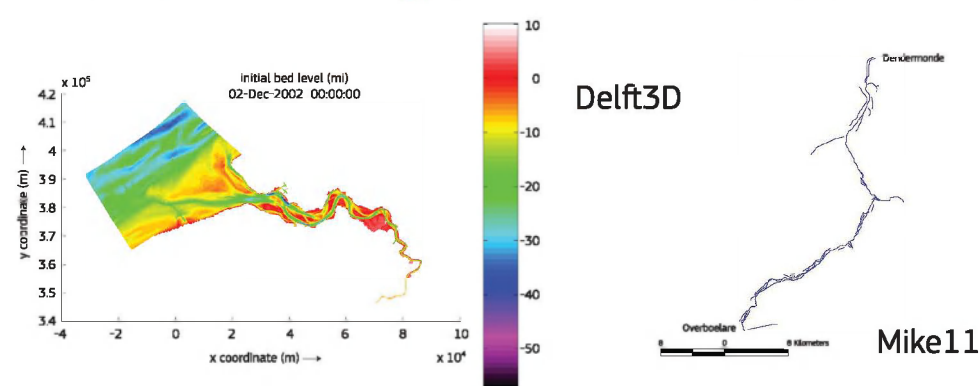
**Objective:** improved flood maps & predictions  
**Study case:** the River Dijle & the River Scheldt  
**Partners:** FH and VMM

### 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