



Integrating models and policy - OpenMI solutions for a sustainable future Programme



Hosted by the European Commission and the OpenMI Association
11th and 12th January 2010
Brussels



Introduction

In almost every domain of policy making, management and science, there is an increasing need to understand the wider **impact of events and decisions**. This is driven by the need to avoid **unintended consequences** and ensure **sustainability**.

One of the most effective ways of predicting future outcomes is through the use of **models**. However, it is rarely feasible to construct a purpose designed model for each issue that arises. It is much more effective to **link** existing proven models. The **problem** has been that, until recently, there has been **no generic, open, non proprietary interface** that will allow any model, of any process, from any supplier to be linked to any other appropriate model.

Using their own and EC research funding, a consortium of world leading companies and research institutions developed a first solution called the **OpenMI**. This opens up huge opportunities for modelling and predicting complex processes.

Following the research phase, the LIFE Environment programme funded a demonstration project, **OpenMI-Life**, to **test** the OpenMI under **operational conditions**. Although it could have been tested against issues arising in any policy, management or scientific domain, it was convenient to choose water, because the Water Framework Directive requires an integrated approach to management.

This workshop will report on

- **The results** of the OpenMI-Life project
- **The plans** for making the benefits of integrated modelling and the OpenMI accessible to policy makers, managers and scientists

The aim of the workshop

The workshop will be in two parts, each designed for a specific audience:

Session 1: Policy makers and senior managers in government, government agencies, industry and research (1st afternoon)

Sessions 2: End users, modellers and model developers (2nd day)

Session 1 will seek to convey that:

- Integrated modelling is emerging as a practical tool for understanding complex processes and anticipating impacts and sustainability issues
- A key new technology, the OpenMI standard, and supporting tools are in place
- New approaches will be required – openness, cooperation and sharing
- A support organisation - the OpenMI Association - is in place
- There is a forward strategy
- The forward strategy is being implemented

- There is world wide support for the OpenMI and the emergence of integrated modelling communities
- Substantial resources are being sought to continue the development of the underpinning technologies and lower the barriers to entry
- There are immense research and development opportunities ahead

Session 2 will seek to convey to:

- Users and modellers:
 - The benefits of integrated modelling through descriptions of OpenMI-Life use cases and other examples
 - The steps in an integrated modelling project
 - Initiatives in the EU and US such as OpenWeb, HydroHub, CSDMS and BGS
 - The opportunities ahead
 - Capacity building plans such as– e-learning
- Model developers
 - How it works
 - The technology is mature, stable and easily implemented
 - The amount of work to make a model OpenMI compliant and the tools to help
 - The OpenMI Association Technical Committee – support and influencing the future
 - The future:
 - The capabilities of OpenMI Version 2.0
 - The Wish list for OpenMI Version 3.0

Outline programme

Session 1 – 11 th January 2010		
Audience:	Policy makers and senior managers in government, government agencies, industry and research	
13:00	- 13:30	Registration and coffee
13:30	- 13:40	Welcome, aim and agenda of the workshop <i>Prof. dr. ir. Huib J. de Vriend</i> (Director science and technology, Deltares)
There are policy issues ...		
13:40	- 13:55	DG Environment and the LIFE Programme <i>Mr Hervé Martin</i> (LIFE Environment and Eco-Innovation, DG Environment, European Commission,)
13:55	- 14:10	A US view <i>John Johnston</i> (Chief, Office of Research and Development, United States Environment Protection Agency)
We have setup a project ...		
14:10	- 14:25	OpenMI-Life <i>Roger Moore</i> (Coordinator of OpenMI-Life and Chairman of the OpenMI Association)
The work has been successful ...		
14:25	- 14:55	Competent authority, commercial and academic view points <i>Veronique Van Den Langenbergh</i> (Head of the River Basin Management team, Vlaamse Milieu Maatschappij (The Flemish Environment Agency))
14:55	- 15:25	Tea
Others have joined in ...		
15:25	- 15:35	Making it accessible - OpenWeb <i>Dr Ian Townend</i> (Director of Research, HR Wallingford)
15:35	- 15:45	CUAHSI HIS, Hydrohub, web services - providing access to data and linkable models <i>Prof. David R. Maidment</i> (Hussein M. Alharthy Centennial Chair in Civil Engineering and Director, Center for Research in Water Resources, University of Texas at Austin)
15:45	- 15:55	Taking integrated modelling into policy and agriculture <i>Dr. Ir. Martin K. van Ittersum</i> (Coordinator of the FP6 SEAMLESS and project and Senior Lecturer (Associate professor) at Wageningen University)

We are committed to driving this initiative forward ...

15:55	-	16:05	Why are developers investing?
<i>Jorgen Bo Nielsen (Director of DHI Software, DHI Water and Environment)</i>			

We have a vision and a plan ...

16:05	-	16:20	The forward strategy of the OpenMI Association
<i>David Fortune (Vice Chairman of the OpenMI Association and Director of Product Innovation, MWH Soft(UK))</i>			

We understand the research ahead ...

16:20	-	16:30	Research requirements and opportunities
<i>Dr Denis Peach (Chief Scientist, The British Geological Survey)</i>			

16:30	-	17:00	Discussion
<i>Prof. Dr. Ir. Huib J. de Vriend (Director science and technology, Deltares)</i>			

17:00	-	17:05	Closing remarks
<i>Roger Moore (Chairman of the OpenMI Association and Coordinator of OpenMI-Life)</i>			

17:05		18:05	Reception
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Session 2 – 12th January 2010

Audience: End users, modellers and model developers

08:30 - 09:00 **Registration and coffee**

09:00 - 09:10 **Welcome**

David Fortune (Vice Chairman of the OpenMI Association and Director of Product Innovation, MWH Soft(UK))

Integrated modelling is a potentially powerful tool ...

09:10 - 09:25 **Linking models for integrated modelling - a description of the OpenMI standard**

Roger Moore (NERC, Chairman of the OpenMI Association and Coordinator of OpenMI-Life)

A generic solution to model linking has been found ...

09:25 - 09:50 **Demonstration of the OpenMI**

Dr Jan Gregersen (Managing Director of LicTek ApS, Member of the OpenMI Association's Executive and Technical Committees)

It has been tested under operational conditions ...

09:50 - 10:30 **Results of OpenMI-Life – the Scheldt**

Johan Van Assel (Senior Research Engineer, Aquafin)

Yves Ronse(Head of River Quality Modelling, Vlaamse Milieu Maatschappij (The Flemish Environment Agency))

10:30 - 10:50 **Results of OpenMI-Life – the Pinios**

Dr. Konstantinos Kokkinos (Researcher, University of Thessaly and Full time Instructor, TEI- Larissa Greece)

Dr. Eleftheria Safiolea (Research Scientist, National Technical University of Athens)

10:50 - 11:00 **Discussion**

David Fortune (Vice Chairman of the OpenMI Association and Director of Product Innovation, MWH Soft(UK))

11:00 - 11:30 **Coffee**

Next steps in model linking - OpenMI Version 2 and beyond...

11:30 - 11:50 **Why is a new version needed?**

Stanislav Vanecek (Chairman of the OpenMI Association Technical Committee and Senior IT solution specialist for DHI (Czech Republic))

11:50 - 12:00 **What does it provide and how?**

Stef Hummel(Member of the OpenMI Association Technical Committee and Deltares)

12:00	-	12:10	Where next - Version 3.0 and beyond
			<i>Stanislav Vanecek</i> (Chairman of the OpenMI Association Technical Committee and senior member of DHI (Czech Republic))
12:10	-	12:40	Discussion
			<i>David Fortune</i> (Vice Chairman of the OpenMI Association and Director of Product Innovation, MWH Soft(UK))
12:40	-	13:40	Lunch
13:40	-	13:45	Welcome back
			<i>Mr Denis Peach</i> (Chief Scientist, The British Geological Survey)
Making integrated modelling accessible ...			
13:45	-	14:00	Pipistrelle - simplifying the processes of making models compliant, linking and running them
			<i>Robert Millington</i> (Implementation Services Manager, MWH Soft (UK))
14:00	-	14:15	Linking models to data and more ...
			<i>Peter Schade</i> (Bundesanstalt für Wasserbau (Federal Waterways Engineering and Research Institute))
14:15		14:30	Adding artificial intelligence
			<i>Dr Andrea Rizzoli</i> (Position/title in/IDSIA, Switzerland)
Creating a world wide integrated modelling community ...			
14:30	-	14:45	Community of practice on integrated environmental modelling
			<i>Dr Bert Jagers</i> (OpenMI Association Executive Committee and Deltares)
14:45		15:00	Building capacity – e-learning
			<i>Dr Christos Makropoulos</i> (Lecturer, School of Civil Engineering, National Technical University of Athens)
15:00		15:30	Tea
Join us!			
15:30	-	15:40	The OpenMI Association <i>Mr/Dr First name Last name</i> (Position/title in/of affiliation)
			<i>Mr Michiel Blind</i> (Secretary, OpenMI Association)
15:40	-	15:50	Discussion
			<i>David Fortune</i> (Vice Chairman of the OpenMI Association and Director of Product Innovation, MWH Soft(UK))
15:50	-	15:55	Closing remarks
			<i>Roger Moore</i> (Chairman of the OpenMI Association and Coordinator of OpenMI-Life)

More information

- About the OpenMI :
<http://www.openmi.org>
- About the OpenMI :
<http://www.openmi-life.org>
- About the workshop :
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Practical information about your stay in Brussels

For further information about the workshop, booking accommodation and the venue [Click here](#)

Registration

To register [Click here](#)