What is OpenMI

Essentially, the OpenMI standard is a software component interface definition for the computational core (the engine) of the computational models in the water domain. Model components that comply with this standard can, without any programming, be configured to exchange data during computation (at run-time). This means that combined systems can be created, based on OpenMI-compliant models from different providers, thus enabling the modeller to use those models that are best suited to a particular project. The standard supports two-way links where the involved models mutually depend on calculation results from each other. Linked models may run asynchronously with respect to timesteps, and data represented on different geometries (grids) can be exchanged seamlessly.

The OpenMI standard is defined by a set of software interfaces that a compliant model or component must implement. These interfaces are available both in C# and Java.

see also: OpenMI scope document 1.4
or OpenMI scope document 2.0