Preface:
Role of research and models in the implementation of the Water Framework Directive

From more than three decades, water research has been a major component of successive EU environmental research programmes with a view of developing the necessary scientific knowledge for the protection of water resources and the development of integrated solutions for the sustainable management of water.

In the context of the 5th EU Framework Programme for Research and Technological Development (FP5), the European Commission has supported the development of modelling tools for the use in the implementation of the Water Framework Directive (WFD). Steps have been taken to transfer these newly developed tools from the research community to operational use of the water managers. In fact, end-user and stakeholder involvement has been a key element in all projects supported in FP5. In addition, the concerted action project, HarmoniCA, has been established to facilitate specific clustering activities. On the European level, a dialogue between the science and policy-making communities has brought together the leading scientists and those responsible for the Common Implementation Strategy (CIS) and WFD implementation.

It has been demonstrated that a close cooperation between science and policy is beneficial to both, the WFD and the RTD communities. The RTD developers will obtain an insight into the problems experienced by WFD implementers, assuring the relevance of their research; WFD implementers would in turn have the opportunity of explaining their needs and participating in the development of solutions, thus assuring the improvement of their tools.

Designing the Programme of Measures (PoM) is one of the key element in building up the River Basin Management Plan (RBMP) as defined by the WFD. The planning process for producing the PoM consists of several consecutive steps, starting from setting the objectives to the analysis of alternative ways of reaching them. In most of the steps, policy decisions need support from science and technology: tools, models, data, information, assessments of different options, best practices etc. The scale of various steps and information needs differs. Some of decision will be made on national level and some on local or river basin district level. Thus different RTD projects have a different role in the process.

The objective of BMW project was to establish a set of criteria to assess the appropriateness of integrated models for the use in the implementation of WFD. Moreover, the project has developed a toolbox where the criteria and the model