Abstract

Concept and Principles of the nofdp IDSS

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Decision Support Systems (DSS) should make data and models manageable, process badly structured questions adequately and support decision-makers in decision-taking processes. With this not only does the decision-maker have condensed and filtered information put at his disposal, but also receives assistance with lengthy, complex planning processes. However, although the decision-maker is in fact supported in the decision-taking process by the provision of correct modern-day information, the decision itself remains his alone.

Modern DSS provide data, model and simulation results as well as expert and local know-how for those participating in the process. In planning and decision processes, the early involvement of a third party is often a deciding factor for success. It is therefore essential that information and planning with the assistance of a DSS be made transparent both for decision-makers and for non-experts alike. Complex visualisation, simulation and optimisation techniques make this easier, whereby the complexity of their operation can nowadays be kept within reasonable limits, in particular due to the latest developments in information technology.

Models like those employed in water management are often highly complex and cannot be used without the specialist know-how and experience of the model constructor. Even multi-criteria analysis processes require basic methodical know-how for their application. Results of these analyses should always be considered against the background of the strengths and weaknesses of a process. Right from the first concept of the nofdp IDSS, the demand for well-structured information and easy applicability in connection with complex models and methods was one of the greatest challenges with which the developers of the IDSS were later confronted too.

In this lecture both the aims and principles which were followed in the conceptualisation of nofdp IDSS and the requirements of the potential users will be presented.