Abstract

Presentation of the “nofdp IDSS”

Presenting Author: Dr.-Ing. Kaj Lippert | Björnsen Consulting Engineers | K.Lippert@bjoernsen.de

Nofdp IDSS is an information and decision-support system for interactively planning measures to protect against floods. It permits a holistic consideration of these planning measures in technical, ecological and economic context (Integrated River Basin Management). The tool enables interdisciplinary solutions in preliminary planning to be drawn up, including a variety of versions for comparison with each other. A clear comparison and evaluation of these variants, based on project-related circumstances and standards, enables a transparent reconstruction of the decision-making process. The tool is designed to help integrate the perspectives of the scientists and engineers involved in the planning, and the participating decision-makers and lobbyists in the entire planning process.

The components of the nofdp IDSS toolbox includes a great many methods: for example, execution of conflict analyses between various use interests; interactive preparation of measures to improve protection against floods that distinguishes between environmental protection measures, regional planning measures and constructive measures; execution of initial hydraulic proofs of the proposed measures; the creation of evaluation matrices and an assessment of the measures compiled as project alternatives according to these standards; and the preparation of project reports and initial topological image analyses of single constructive measures with the help of Google Earth ™. The implemented methods are largely based on geographical analyses, which is why attention was placed on the development of nofdp IDSS as an easily understandable presentation of spatial circumstances. Nofdp IDSS is available as an open source development in English, German and Dutch language versions.