

THE FLOOD FORECASTING STRUCTURE FOR THE RIVER RAAB – AN EXAMPLE OF INTERNATIONAL FLOOD MANAGEMENT

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Abstract

The development of the Raab Flood Forecasting System is a project with European dimensions. The Raab watershed extends over two countries: Austria and Hungary whereas the last one is located downstream compared to Austria. Due to these geographical characteristics the probability for a flood genesis is much more significant in Austria than in the Hungary but the related flooding risks are distributed over the entire watershed. The project Flood Forecasting Raab gives a concrete example of international cooperation in the field of Flood management. The structure in development will be build out of one International Flood Forecasting Centre and four regional centres. It illustrates how a trans-boundary flood forecasting system can operate. The main element is the International Flood Forecasting Centre installed in Graz (Austria) where all the necessary online data and meteorological forecasts will be automatically collected and formatted for the simulations. Furthermore, each hour a simulation will start with time of forecast of six days whereas the main results will be published on the internet. The complete model setup and the results will be transferred to the four regional centres. Therefore, at these regional centres it will be possible to analyse detailed results and to develop local scenarios using for example modified meteorological forecasts or other initial conditions. This technical solution allows a perfect synchronisation for online data, pre and post processing files, information and results from the simulations between all five Flood Forecasting Centres. It contributes therefore to a noticeable improvement for information organisation between Austria and Hungary and should be considered as a new method for Flood and Risk management. The new communication strategy coupled with the automatic and continuous modelling as well as the result publication on the internet delivers a concrete example for Flood prevention and resources management that can be transferred to other trans-boundary watersheds.

Key words: Flood forecasting, International Basin, Raab River