



RIKO - a Guideline for a Risk based Planning of Countermeasures against Natural Hazards

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Risk assessment has been used in many different disciplines like the financial or health sector, engineering and technical issues, biodiversity, nuclear technology or terrorism prevention for many years or even decades. The application of risk assessment to natural hazards has become widespread in the last years because coping with complex systems requires a systematic analysis of scenarios and its consequences, an evaluation of these results and if necessary a risk reduction strategy. The decision making process is a crucial step in dealing with natural hazards and requires a general methodology.

The National Platform for Dealing with Natural Hazards PLANAT in Switzerland has defined the risk concept as the leading guideline for dealing with natural hazards in the future. Following a strategy developed in the years 2000 to 2004 a software and a guideline for risk based planning of countermeasures against snow avalanches, debris flows, flood, rock fall and landslides is developed at present (Project name: RIKO). The basic idea of this guideline is to present a structured procedure for risk assessment and to combine technical, biological, organisational measures and landuse planning in a cost-effective way so that defined protection goals, given by the national strategy, are achieved. The target group of the software and the guideline are practioners in consulting offices which are in charge of planning of countermeasures.

In this paper we present the general setup and the workflow proposed in RIKO. By means of an example we show the results of a typical planning process and the uncertainties which are an inherent part of a risk based planning process.