

Paper Number: 5280

Landslide susceptibility modelling process – A generic methodology applicable at the municipal scale

Marko Komac, Jernej Jež

¹IUGS EC

²Geological Survey of Slovenia

Abstract

Methodology was developed for estimation of slope mass wasting processes (landslides, rock-falls, debris-falls) susceptibility, taking the Bovec municipality in NW Alpine Slovenia as the case study area. The purpose of the susceptibility maps at the scale 1:25,000 as the final products is to be directly applicable in spatial planning of local communities (municipalities). The requirements that were followed to achieve this aim were: expert approach, GIS tools support, reasonable time of elaboration, and easy to read and understand product. Elaboration of the final products comprises four consecutive phases, of which the first three are desk-top phases: 1) synthesis of archive data, 2) probabilistic model of landslide susceptibility, 3) compilation of phases 1 and 2 into the final map at the scale 1:25.000. As the last phase, field reconnaissance of most hazardous areas is foreseen.

