ABSTRACT

The thesis deals with evaluation of landslide risk assessment in a territory situated in the Outer Western Carpathians. They are generally very susceptible to creation of landslides thanks to the flysch bedrock.

Landslide susceptibility maps were created for the purpose of risk analysis. They were defined as maps depicting spatial distribution of areas with suitable conditions for landslide formation (Glade, Crozier, 2005b). The risk analysis was carried out on the basis of an inventory map of landslides and an expert map defining levels of susceptibility of an area based on known landslides and maps of slopes. The last model used for the risk analysis was a physical model of susceptibility created by the SINMAP programme. The landslide hazard for individual susceptibility maps was defined as well, which means inclusion of time probability of landslide creation.

The risk analysis based on mentioned susceptibility maps was carried out by means of qualitative method which determines the final risk level combining qualitative measure of likelihood and its potential consequences on elements potentially at risk. The analysis results in landslide risk maps of elements potentially at risk in the studied territory.

KEY WORDS

- **Landslide** – the downward falling or sliding of a mass of soil, detritus, or rock on or from a steep slope;
- **Risk** – a measure of the probability and severity of an adverse effect to health, property or the environment;
- **Elements at Risk** – meaning the population, buildings and engineering works, economic activities, public services utilities, infrastructure and environmental features in the area potentially affected by landslides.
- **Hazard** – a condition with the potential for causing an undesirable consequence (the landslide).