

## **Abstract**

**Title:** Current state of active rescue equipment used to prevent snow avalanches.

**Objectives:** The goal of the bachelor thesis is to compare currently available active rescue devices used in a mountain environment

**Methods:** The methods used in my bachelor thesis to obtain the necessary information on active rescue devices were research and study of the literature and its subsequent segregation, together with informal guided interviews with experts who deal with this issue (HS members) and subsequent analysis of the issue. Comparison of the information sought is used as an additional method.

**Results:** There are currently 14 avalanche backpack and avalanche vest systems available on the market. There are currently 10 types of cartridge systems and the remaining 4 are electric systems. As a result of my bachelor thesis I have prepared a comprehensive table with all currently available systems and all necessary information.

**Keywords:** snow avalanche, airbags, avalanche airbag, avalanche hazard, active rescue equipment.