Introduction

The International Commission for Alpine Rescue (ICAR, [http://www.icarcia.org]) was founded 1948 by influential representatives of the alpine rescue organizations in Austria, France, Germany, Italy and Switzerland. From the beginning of the partnership, the aim was to coordinate materials, techniques, strategies and information for alpine rescue actions. At present, 33 organizations representing 22 countries (in Europe and Northern America) are associated in the ICAR. At the annual meetings, four sub-commissions deal with the different tasks of alpine rescue:

- Mountain Emergency
-  Terrestrial Rescue
- Air Rescue
- Avalanche Rescue

Beside climbing, glacier or cave accidents, snow avalanches are of eminent interest. Recommendations for safety measures in outdoor equipments are a strong tradition in the avalanche section of ICAR. We mention the harmonization of the frequency for avalanche beacons in 1989, which, after intense discussions, was fixed worldwide to 457 kHz after ICAR’s intervention. Also 1993, when the avalanche warning services coordinated the avalanche danger scale, ICAR played a dominant role in the harmonization.

In analyzing the questionnaires of the rescue teams and the characteristics of the winter progress, detailed information on avalanche accidents can be found and should stay a main focus. Today, efforts are necessary to merge the practical work of the alpine rescuers, avalanche warning services and educators.

Overall statistics for the last 20 years prove an annual mean of 106 avalanche fatalities in the alpine countries and 138 after adding those in Northern America.

Avalanche Fatalities overall, 1983/84 - 2002/03, 20 years

Visual trend overall countries.

Avalanche Fatalities, 1983/84-2002/03, 20 years

ICAR - Countries

The experiences in the different countries have varied greatly. Following a marked downward trend (between 1984/85 and 1995/96), Austria and Switzerland have seen a clear rise in the number of victims in recent years. There are no clearly observable trends for France, Slovenia, Liechtenstein and Germany. In these countries, the number of victims remains either at a relatively high or relatively low level. By contrast, the numbers of victims in the United States and Canada is rising steadily.

Avalanche Fatalities, 1983/84-2002/03, 2 x 10-year periods, ICAR countries with complete statistical series.

The experiences in the different countries have varied greatly. Following a marked downward trend (between 1984/85 and 1995/96), Austria and Switzerland have seen a clear rise in the number of victims in recent years. There are no clearly observable trends for France, Slovenia, Liechtenstein and Germany. In these countries, the number of victims remains either at a relatively high or relatively low level. By contrast, the numbers of victims in the United States and Canada is rising steadily.

Avalanche Fatalities, 1983/84-2002/03, 2 x 10-year periods, ICAR countries with complete statistical series.

Special efforts are sometimes necessary (e.g. artificial avalanche release) to reduce the risk of the rescuers themselves.

Avalanche Fatalities, 1983/84 - 2002/03, Overall categories and member-countries ICAR

This presentation also very probably explains why avalanche accident data are viewed differently in individual countries, especially by policymakers. Consequently, it’s not surprising that each country with similar numbers of victims has not developed similar, or, in some cases, centralized institutions. It is important that the different surface areas of mountainous terrain are taken into account.

Avalanche Fatalities, 1983/84 - 2002/03, Overall categories and member-countries ICAR