

ICAR Avalanche Commission - Best Prevention Practices Survey Results FINAL

RESPONDENTS BY COUNTRY

Austria	Barbish Gebhard , Austrian Mountain Rescue Service; Walter Wurtl , Mountain Rescue Austria
Canada	Clair Israelson , Canadian Avalanche Association
Croatia	Frane Bebic , Mountain Rescue Service of Croatia
France	Francois Sivardieren, Didier Le Gall - ANENA,
Germany	Bernd Zehetleitner , Bergwacht Bayern
Iceland	Auder Elva Kjartansdottir - Icelandic Meteorological Office
Italy	S. Pivot , AINEVA; G. Frangioni , CNSAS, S. Sterpinio , SVI-CAI
Liechtenstein	Peter Lampert - FL LawD
Norway	Albert Lunde , Norwegian Red Cross Rescue Corps
Romania	Ion Sanduloiu , ANSM Romania
Slovakia	Jan Peto , Mountain Rescue Service - Avalanche Warning Center
Switzerland	Hans-Jurg Etter, Jakob Rhyner ; SLF
USA	Doug Abromeit , USFS National Avalanche Center, Ethan Greene , Colorado Avalanche Information Center

SECTION 1: Availability, distribution and frequency of public avalanche forecasts in your country.

1.1 Who produces public avalanche forecasts in your country? Select all that apply

	Govt Agency	NGO	Ski Resorts	Other (specify)
Austria	✓			
Canada	✓	✓	✓	
Croatia				none
France	✓		✓	
Germany	✓			
Iceland				not yet public
Italy	✓			
Liechtenstein				included in Swiss forecast
Norway	✓	✓	✓	
Poland				
Romania	✓			National Institute for Meteo and Forecasts
Slovakia	✓			
Switzerland	✓			
USA	✓	✓		

1.2 Avalanche forecast center organization

	National	Regional	Ski Resorts	
Austria	✓	✓		
Canada	✓	✓	✓	
Croatia				
France	✓		✓	
Germany	✓	✓	✓	
Iceland		✓		
Italy		✓		
Liechtenstein				included in Swiss forecast
Norway	✓		✓	
Poland				
Romania	✓			an avalanche comission that will build a center
Scotland				
Slovakia	✓			
Sweden				
Switzerland	✓			
USA		✓		

1.3 Avalanche forecast frequency

	Daily	6/week	4/week	3/week	2/week	weekly	
Austria	✓						Every morning at 7:30. Some other provinces in Austria period did not have a daily forecast, but then they will have a longer period or then a new forecast if the situation changes
Canada	✓			✓		✓	National Parks and some ski resorts issue forecasts daily. 3 times per week for CAC forecasts. CAC - 1 time per week for remote, low use regions
Croatia							None
France	✓						Issued at 4 pm each day for the next 24 hours
Germany	✓						The reports will come out every morning at 07.00 am.
Iceland						✓	
Italy			✓	✓			Usually 3/4 times per week (for the majority of the organisations), but more if necessary (extraordinary avalanche forecast)
Liechtenstein							included in Swiss forecast, with same frequency
Norway							There are no regular public avalanche forecasts in Norway, apart from those issued during Easter- and winter-holidays, and some specific roads. Ski resorts issue their own forecasts.
Romania	✓						Usually, the forecast is daily, but if nothing new to be mentioned hasn't appeared, it could be at a couple of days.

Slovakia	✓			
Switzerland	✓			
USA	✓		✓	✓

7 regional avalanche forecasts (in combination map and text), 8am. 1 national over-all forecast 5 pm (1 page text, 1 map; 4 languages (E, F, G and I) 72h early warnings for safety professionals in imminent critical situations (40-70% prob. for reaching level 5)

There are 19 backcountry avalanche centers in the USA. Thirteen of the centers provide daily avalanche advisories, five of the centers provide two to three advisories per week and one of the centers only provides avalanche information

1.4 What is the average size of your forecast regions? (sq. kilometers)

	Small < 500	Medium 500 - 5000	Large 5-10,000	Huge > 10,000	
Austria		✓			500 - 5000 sq. km
Canada	✓			✓	100 sq km to 29,000 sq km; average 20,000 sq km
Croatia					
France	✓	✓			300 to 800 sq. km
Germany	✓				50 km
Iceland	✓				
Italy	✓				
Liechtenstein					30 sq. kilometers each zone of forecast region as in Switzerland
Norway	?	?	?	?	Natural mountain regions
Poland					
Romania		✓			about 2000 sq km
Slovakia	✓				150
Switzerland	✓	✓			total 27'000 km2, divided into 118 sub regions
USA	?	?	?	?	They vary widely

1.5 How are public avalanche forecasts distributed in your country? (select all that apply)

	phone	fax	email	website	radio	TV	newspaper	trailheads	MMS
Austria	✓	✓	✓	✓	✓	✓	✓	✓	
Canada	✓	✓	✓	✓	✓	✓	✓	✓	
Croatia									
France	✓		✓	✓				✓	
Germany	✓	✓	✓	✓	✓		✓	✓	
Iceland				✓					

Off piste trailheads, not backcountry trailheads

Italy	✓	✓	✓	✓	✓		✓		
Liechtenstein	✓	✓	✓	✓	✓	✓	✓	✓	✓
Norway	✓	✓	✓	✓	✓	✓	✓	✓	
Romania		✓	✓	✓	✓	✓	✓		
Slovakia	✓		✓	✓	✓	✓	✓		
Switzerland	✓	✓	✓	✓	✓	✓	✓	✓	✓
USA	✓	✓	✓	✓	✓	✓	✓	✓	

1.6 Length of avalanche forecast season

Austria	Nov 1 - May 1
Canada	Nov 15 - Apr 15
Croatia	None
France	Dec 15 - May 1
Germany	Dec 15 - May 1
Iceland	
Italy	Dec 1 - May 1
Liechtenstein	same as Switzerland (to be confirmed by Peter Lampert)
Norway	No specified season
Romania	Nov 20 - May 15
Slovakia	Dec 1 - May 1
Switzerland	Nov 15 - May 15
USA	Nov 1 - May 1

1.7 Estimated percentage of backcountry travellers that use avalanche forecasts before going into the mountains for recreation?

Austria	50% - 80%
Canada	50% of backcountry skiers and boarders, 10 % of snowmobile riders
Croatia	none
France	I really don't know and think nobody can say...
Germany	50 % of all backcountry ski tourists; 5 % of all off-piste riders
Iceland	none
Italy	50% (a difficult estimation; in the next season we'll submit a statistic form to the backcountry users)
Liechtenstein	Probably similar to Switzerland or Austria (to be confirmed by Peter Lampert)
Norway	No surveys done to clarify this. During Easter- and winter holidays; probably 80%
Romania	hard to say... about 40-50%
Slovakia	20% always, 50% sometimes
Switzerland	No systematic survey, about 50-60% (about 500'000)
USA	no response to this survey question

PROPOSED DRAFT ICAR Best Practices - Public Avalanche Forecast Programs

- 1.1 There is a structured program providing avalanche forecasts and other warning services in avalanche prone areas of the country
- 1.2 Avalanche forecasts are produced by government agencies, or NGOs with some government funding. Ski resorts can provide useful local information.
- 1.3 National and/or regional avalanche forecast centres are most common. Ski resorts can supplement national and/or regional programs
- 1.4 Daily avalanche forecasts are most common. Frequent avalanche forecasts are preferable to bi-weekly or weekly forecasts
- 1.5 In the countries surveyed most avalanche forecast regions are <5000 sq. kms
- 1.5 Use "push" (fax, email, radio, TV, newspapers, trailhead postings, MMS) and "pull" (phone, website) methods to distribute avalanche information
- 1.6 The avalanche forecast season should run from late fall into late spring

