

CONSUMER AGENCY'S GUIDELINES FOR THE PROMOTION OF SAFETY ON SKI SLOPES

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Consumer Agency's guidelines

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Legislative basis:

- Product Safety Act 914/1986

Target groups:

- businesses
- control officials

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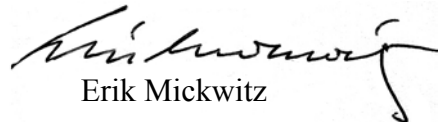
The purpose of these guidelines is to define minimum requirements for the safe use of ski slopes and thus improve ski slope safety, the monitoring of safety under section 3 of the Finnish Product Safety Act (914/1986, amended 539/1993) and the prevention of accidents.

These guidelines were negotiated by the Finnish Consumer Agency with the Finnish Ski Area Association. They were approved by the Consumer Agency on 29 August 1995.

The guidelines were last revised by the Consumer Agency on 10 November 2000. Revisions were negotiated with the Finnish Ski Area Association. The Federation of Finnish Insurance Companies and the Finnish Motor Insurers' Centre were also represented in the working group.

These enlarged and revised guidelines as approved by the Consumer Agency on 20 November 2000 will enter into force at the beginning of the 2000/2001 skiing season.

Director General


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THE FINNISH CONSUMER AGENCY'S GUIDELINES FOR THE PROMOTION OF SAFETY ON SKI SLOPES 10.11.2000

1. PURPOSE

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These guidelines were negotiated by the Finnish Consumer Agency with the Finnish Ski Area Association. They were approved by the Consumer Agency on 29 August 1995.

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2. FIELD OF APPLICATION

These guidelines cover the safety of downhill ski services. They do not cover the safety of other services offered by ski centres, including equipment rentals or the technical characteristics of ski lifts. Nor do they cover exceptional activities such as safety requirements or monitoring arrangements for competitions. Guidelines for the promotion of safety on snowtubing slopes are presented in Appendix 1.

3. BASIC TERMS

3.1 Ski slope service

- the provision of ski slope access to consumers on skis, snowboards or other such equipment for recreation purposes.

3.2 Ski slope

- a clearly marked slope maintained for downhill skiing and similar activities, including connecting runs.
- in applying sections 4.6 and 4.7, lower and upper lift stations and adjacent facilities maintained for skiers will be regarded as part of a ski slope.

3.3 Colour coding of ski slopes

- green: very easy, inclination no greater than 15% (8°)
- blue: easy, inclination 15-25% (8-15°)
- red: difficult, inclination 25-45% (16-25°)
- black: very difficult, inclination at least 45% (25°)

3.4 Ski slope and special slope facility signs

- signs and other markings used to direct or inform skiers and snowboarders.

3.5 Warning nets and poles

- nets and poles intended to attract skiers' and snowboarders' attention and warn them of risks
- used to point out dangerous places.

3.6 Safety padding

- padding intended to prevent injury to a colliding skier or snowboarder
- also intended to attract skiers' and snowboarders' attention and warn them of risks.

3.7 Safety fence and net

- fence or net intended to stop a colliding skier or snowboarder
- also intended to attract skiers' and snowboarders' attention and warn them of risks.

3.8 Snow fence

- fence intended to collect snow.

3.9 Snow grooming machine

- motorized vehicle with cab on tracks or wheels designed to maintain ski slopes or other such heavy vehicle
- can include additional equipment for different purposes and cabin or other facilities for passengers.

3.10 Special ski slope facilities

- ski slope facilities intended and marked for special activities, such as half-pipes, streets and moguls.

4. MINIMUM SAFETY REQUIREMENTS FOR SKI SLOPES

4.1 Ski slope

A ski slope or the use of a ski slope must not cause a hazard to the health or property of consumers using the services of a ski centre as proscribed by section 4 of the Product Safety Act. In addition to the provisions on the safety of services in the Product Safety Act, a ski slope must meet the minimum safety requirements in these guidelines.

Ski slopes must always be safe to use, taking into consideration prevailing weather conditions and the number of skiers. In evaluating the general safety of ski slopes, special attention should be paid to the thickness of snow and any icy patches on ski slopes.

Ski slopes, with the exception of special ski slope facilities, may not have fixed or other obstacles. Fixed obstacles which cause a minor safety risk and which cannot be eliminated or moved without considerable inconvenience are permitted according to the conditions stipulated in point 4.4.

Structures intended for special ski slope facilities must be designed and located so that the ski slope and its use do not cause a hazard to the health or property of consumers using the services of a ski centre.

The signs and safety arrangements described in points 4.2-4.6 must be used on ski slopes.

Ski slopes used after dark must be lighted.

4.2 Ski slope and special ski slope facility signs and their use

Signs must be clear, understandable and easy to observe. Written signs must be written in both Finnish and Swedish at ski centres in bilingual municipalities.

Signs must be used in the locations and situations shown in Appendix 2 to guide and warn skiers and snowboarders. The use of the established signs presented in the appendix (or the Finnish Standards Association's Standard SFS 4424: Signs for outdoor life and sports) is recommended.

The level of difficulty of a ski slope should be determined primarily on the basis of the steepest stretch with a length of at least 50 metres. If this basis cannot be used, the level of difficulty should be determined according to steep stretches which together make up 1/10 of the total length of a ski slope. In border cases the width of the ski slope, the shape of the terrain and other such characteristics should also be taken into consideration.

In locations where there is a risk of skiing off the piste (for example on open fells), colour markings must be used on the inner and outer edges of a ski slope or the edges of the ski slope must be indicated with poles.

Special ski slope facilities must be marked to indicate their use.

Ski slope signs must be located in the proper places and at a suitable distance from obstacles etc. Signs must be placed so that they do not cause a hazard to skiers and snowboarders.

4.3 Characteristics and use of warning nets and poles

Warning nets must be at least 100 cm in height and orange or black and yellow striped in colour. Warning poles must be at least 150 cm in height and orange or black and yellow striped in colour. If a snow fence is used for a similar purpose, it must also meet the above colour requirements.

Warning nets must be used to mark large areas and warning poles individual places. Warning nets must be used if it is necessary to restrict access to a certain area.

Examples:

- areas observed by the ski centre in which there is not enough snow for skiers and snowboarders;
- temporary structures observed by the ski centre (jumps etc);
- areas that have been blocked off, for example children's ski slopes and special ski slope facilities.

4.4 Characteristics and use of safety padding

Safety padding must be at least 150 cm in height and orange or black and yellow striped in colour. It must retain its protective characteristics regardless of changes in the weather.

Safety padding must be used around fixed obstacles on the piste that are allowed on the basis of point 4.1.

The lower part of the safety padding must be attached so that it touches the snow.

4.5 Characteristics and use of safety fences and nets

Safety fences and nets must be at least 150 cm in height and orange or black and yellow striped in colour. They must be able to stop a colliding skier or snowboarder in all situations. Safety fences and nets must be designed so that they do not cause an unnecessary hazard to skiers and snowboarders. They must be used in places where a fence or net is necessary to protect skiers and snowboarders from serious injury. Warning nets and snow fences are not to be used as safety fences.

Examples:

- steep drops and quarries.

Safety fences and nets must be attached so that their lower parts touch the snow and so that they do not cause any unnecessary hazard to skiers and snowboarders.

4.6 Use of motorized vehicles on ski slopes that are in use

General

Motorized vehicles can be used on ski slopes in use only if they have to be used:

- to fulfil the obligations referred to in points 4.1 and 5;
- because of an accident;
- for the maintenance of other ski slope activities such as cafe services.

Before a grooming machine is driven onto a ski slope, warning signs must be placed at the top and bottom of the ski slope and at access points on the ski slope and sufficient time must be allowed for skiers and snowboarders to notice signs.

Safety

When a motorized vehicle is driven on a ski slope, in order to prevent accidents:

- the vehicle should primarily use a closed lift track;
- secondarily it should use the area next to a lift track, if this is at least three metres wide, or the edge of the ski slope.

If the above routes are not possible because of the terrain or the characteristics of the vehicle, the vehicle should use some other safe route as marked on the route map and:

- the vehicle should not cross the ski slope unless this is absolutely necessary, and if it does cross the ski slope it should do so in a straight line in a part of the ski slope where it can easily be seen, if possible using the narrowest part of the ski slope;
- the vehicle should not cross the lift track, including the upper station, if they are being used by skiers;
- if two or more vehicles are on the same slope simultaneously, they should move in a convoy.

Routes reserved for vehicles must be marked on the route map.

Speed limits

Snowmobile, all-terrain vehicle or other L-class vehicle as referred to in the Finnish Decree on the Structure and Equipment of Vehicles (1256/92) or other such motorized vehicle: 40 km/h.

Grooming machine or other such motorized vehicle: 20 km/h.

Speed limits can be disregarded in an emergency situation (for example to pick up an injured skier) or temporarily if terrain conditions make this necessary.

Use of special equipment designed to attract attention

The equipment mentioned in point 4.7 must always be used when driving a vehicle on a ski slope that is in use. However, a grooming machine is required to use an audible signal only in the following situations:

- starting out;
- backing up;
- in places where vision is obstructed;
- in weather or other conditions where vision is obstructed.

4.7 Visibility of motorized vehicles used on ski slopes that are in use

In order to increase visibility, snowmobiles, grooming machines and other such motorized vehicles must be equipped with the following:

a) snowmobiles, all-terrain vehicles and motorized vehicles of a similar type:

- warning flag: flag at least 0.1 square metres in size and orange in colour attached at a height of at least 2 metres from the ground;
- lights: officially approved driving lights as referred to in the Decree on the Structure and Equipment of Vehicles (1256/92);

b) grooming machine or other such motorized vehicle:

- audible signal: driver-operated audible signal;
- flashing light: officially approved flashing yellow light that is installed on the roof of the vehicle and turns 360° as referred to in the Decree on the Structure and Equipment of Vehicles (1256/92).

5. MONITORING OF SAFETY

The service provider is primarily responsible for the monitoring of safety, according to section 3 of the Product Safety Act. Ski centres must monitor safety daily when ski slopes are in use. Prevailing weather conditions and the number of skiers and snowboarders must be taken into consideration in evaluating the need for monitoring. Care should also be taken to ensure that ski slopes are safe for skiers and snowboarders to use in terms of their basic characteristics as outlined in the second paragraph of point 4.1.

Authorities responsible for monitoring safety are the Consumer Agency, the provincial state office and the local body or officer (health inspector) referred to in section 7 of the Product Safety Act.

6. SKI SLOPE SAFETY DOCUMENT

A ski centre must have a written ski slope safety document that includes at least the minimum information on the arrangement of ski slope safety and the required monitoring of safety according to the model ski slope safety document in Appendix 3.

7. IMPLEMENTATION

The Finnish Ski Area Association will strive with the means at its disposal to ensure that its members implement the provisions in this agreement.

On the initiative of the Consumer Agency or the Finnish Ski Area Association, negotiations will be held as necessary on matters regarding the implementation of these guidelines and other instructions as well as the improvement of ski slope safety.

To facilitate the implementation of these guidelines and to improve ski slope safety, the Finnish Ski Area Association has a working group on ski lift and ski slope safety, with a permanent seat for a representative of the Consumer Agency.

8. ENTRY INTO FORCE

These enlarged and revised guidelines as approved by the Consumer Agency on 10 November 2000 will enter into force at the beginning of the 2000/2001 skiing season.

Appendix 1

Guidelines for the improvement of safety on snowtubing slopes

These guidelines are divided into three parts:

1. Minimum requirements for snowtubing lifts
2. Minimum requirements for snowtubing runs
3. Guidelines for customers.

1. Minimum requirements for snowtubing lifts

1.1 The lower station must be a smooth area at least as large as the diameter of the snowtube where the snowtube will stay in place.

1.2 At the lower station the snowtube must be prevented from getting caught in the lift wheel with the help of a snow wall, fence or other fixed obstacle.

1.3 The snowtube must be prevented from getting under the towline for example with the help of a snow wall about 30 cm in height between the towline and the track or in some other appropriate way.

1.4 The track should have an outward slope of 1%. The track should be at least 1.5 times as wide as the diameter of the snowtube, up to a maximum width of 3 metres.

1.5 A snowtube that has become unhooked should be prevented from colliding with the snowtube behind it with the help of a safety chute next to the track or by using safety walls at 15-metre intervals. The safety chute should have an outward slope of 2%. A snow wall or other obstacle used as a safety wall, such as a bale of hay or net fence, should be at least 50 cm in height.

1.6 The unhooking of the snowtube at the upper station should be ensured by structural means or by the design and slope of the station.

2. Minimum requirements for runs

2.1 The location of a snowtubing run should be chosen so that there is a level area at the bottom of the slope that is at least three times as long as the run or a sufficient upward slope so that the snowtube will come to a stop and the snowtube will not slide backwards. The characteristics of the snowtube should be suitable for the shape of the slope as well as prevailing slope conditions.

2.2 The run should be designed so that snowtubers cannot slide out of chutes in any circumstances.

2.3 The starting point for the run should be designed so that snowtubers cannot:

- start higher up
- go outside the chute
- take the wrong way.

2.4 The starting point for the run should be clearly marked.

2.5 Snowtubers should be given a clear starting signal with the help of lights, signs or a supervisor's signal. If the run is obstructed, it must be possible to prevent the next snowtuber from starting.

2.6 The lower part of the run must be arranged so as to prevent access by other persons besides snowtubers.

2.7 Instructions for snowtubers should be on display at the ticket office and starting point.

2.8 The operator of a snowtubing run must have a written slope safety document according to the draft in Appendix 3.

2.9 Personnel must make trial runs and visually inspect the starting point, chutes, the end of the run and the condition of safety walls before the run is opened each day and as necessary if slope conditions change.

2.10 Personnel must keep a record of trial runs. This record must contain the following information: the date, the person making the run, special remarks and measures.

2.11 The operator of a snowtubing run should have a sufficient number of helmets available.

3. Instructions for customers at snowtubing runs

1. Sign at ticket sales point

- We recommend the use of a helmet
- Downhill ski boots should not be worn
- One person per tube
- Stay seated during lift, facing downhill
- Do not hold on to the towline during lift
- Stay seated during run, keeping feet up and holding onto straps
- Do not go outside the chute
- Get out of the way immediately after the run
- Return the snowtube after use

2. Sign at starting point

- Start when you receive a signal from the supervisor or when the green light is switched on or when the snowtuber before you has passed a certain line
- Stay seated during the run and hold onto straps
- If the snowtube turns over, get out of the way
- After the run, get out of the way

3. Sign at the bottom of the run

- After the run, get out of the way
- Watch out for other snowtubers

Appendix 2

Draft for a ski safety document

1. Person in charge of slope safety:

- Name of person and specification of tasks.

2. Person in charge of safety during the work shift:

- Position and specification of tasks
- Procedure for confirming responsibility and changes in responsibility
- The person in charge of safety during the work shift must be available all the time at the ski center.

3. Use of motorized vehicles on slopes:

- Instructions for the use of motorized vehicles on slopes at this particular ski centre
- Route map appended to instructions
- Explanation of terrain conditions or other special reasons on account of which exceptions have been made to the primary and secondary routes mentioned in point 4.6.

4. Instructions in case of accidents:

- list of first aid and patient transport equipment
- order of action
- instructions for requesting assistance
- description of procedures for getting an injured person to a location where medical help can be given.

5. Accident recording and investigation of accidents:

- description of accident recording and the arrangement of investigations
- the site of an accident should preferably be described immediately after the accident has occurred.

The descriptions and task specifications in the document should be as detailed as required in view of the size of the ski centre.