



National Officials Program
LEVEL 1
Alpine, Para Alpine, Ski Cross

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INTRODUCTION

This course is the first step to the fascinating and rewarding role of Alpine Official. Without your active participation in the racing program in the role as an Official, the alpine, para-alpine and ski cross communities and competition, as we know it today, would be impossible and many young athletes would not have the opportunity to participate in this sport.

The National Alpine Officials' program is a structured and integrated program involving four levels of Officials. It is administered by the Alpine Canada Alpin (ACA) National Officials Committee which includes Officials Chairpersons from the Provincial Sports Organization (PSO) level.

Level I is a basic course prepared for race volunteers with little or no experience as alpine race officials. The goal is simple: To inform you about the disciplines of alpine, para-alpine and ski cross.

After presenting you the overall program of alpine competitions in Canada, as administered by Alpine Canada Alpin, a member organization of the Canadian Ski Association, and the PSO's, your course conductor will inform you about the National Officials' program.

The different types of race events will be explained, how they are organized, the required personnel to run a race and the roles and duties those involved.

You will receive information on timing and learn the responsibilities of the Gate Judge. You will see examples illustrating diverse situations. The main objective is to allow all level 1 Officials to better understand these two fundamental aspects of Alpine Canada's three race disciplines.

All sports are regulated by a set of rules, alpine skiing is no exception. However, during this course, only the necessary rules of this level will be presented, and in an informal manner.

1. STRUCTURE AND ADMINISTRATION OF ALPINE SKI RACES IN CANADA

1.1. INTERNATIONAL SKI FEDERATION

The Federation International de Ski (FIS) is the international governing body for alpine and ski cross.

Its headquarters are located in Switzerland. It is the parent body of ski racing world wide of which Canada and the Canadian Snowsport Association (CSA) is one of its members. The International Ski Federation publishes the alpine rule book “(ICR)” under which all sanctioned races are run and administers the international ski racing program including World Cup, World Championships and Olympic events.

1.2. THE CANADIAN SNOWSPORT ASSOCIATION

The Canadian Snowsports Association (CSA) www.canadiansnowsports.com holds membership in the International Ski Federation (FIS) as the umbrella body representing each of its member disciplines.

The CSA represents its member disciplines within the Federation International de Ski (FIS); Canadian Olympic Association (COA); Winter Sport Institute (WinSport); Fondation Ski Canada Foundation; and the Canadian Ski Council (CSC) as well as numerous other agencies involved in the Canadian snow sport system with respect to the National Ski Federations in over 105 countries.

The purpose of the CSA is to work with its members according to the following principles:

- 1) Manage Canada’s membership within the FIS.
- 2) Represent the CSA membership with those affiliations identified by the Board.
- 3) Serve as the collective voice for members and Canadian competitive snow sports.
- 4) Deliver optional services that benefit the majority of the membership.
- 5) Provide advice, assistance and optional operational services to members as requested and as is feasible and cost effective.
- 6) Manage Sport Accident, Liability, Directors & Officers and other insurance programs.

1.3. ALPINE CANADA ALPIN








Alpine Canada Alpin (ACA) a member of the CSA is responsible for all aspects of alpine ski racing in Canada. ACA’s mandate of the alpine discipline is to:

- a) To promote competitive and non-competitive alpine skiing in Canada including all disciplines of alpine ski races;
- b) To govern the conduct of National alpine ski competitions and ensure that races are conducted in accordance with the established standards.
- c) To select and train members of the Canadian Alpine Ski Team;
- d) To provide guidance, information and assistance to the Provincial Sports Organizations (PSO) thus to further the development of competitive alpine skiing.
- e) Encourage support of its programs by the general public.

To implement this mandate, the Alpine discipline (ACA) is governed by a volunteer executive and managed by a professional staff headed by a President/CEO. The executive is responsible for establishing policy; the professional staff is responsible for implementing it.

1.4. PROVINCIAL TERRITORIAL SPORT ORGANIZATIONS (PTSO)

Alpine Canada Alpine as a whole has a membership through regionalized area representations called Provincial Sports Organizations (PSO).

 BC ALPINE	 ALBERTA ALPINE	 ALPINE ONTARIO	 SKI QUÉBEC ALPIN
 YUKON	 SASKATCHEWAN	 SKI NB	 ALPINE SKI NOVA SCOTIA
Territoires du Nord-Ouest et Nunavut	 MANITOBA ALPINE SKI	 P.E.I.	 Newfoundland & Labrador

1.5. RACING PROGRAMS

Category	Age Group
Entry Level	6 -11 years old [U12 and younger]
PSO and National Points Series	12 – 19 years old
Master Series	18 years old and older [U21 and older]

1.5.1 NON-POINT PROGRAMS

Entry Level:

Category	Age Group
U10	8 – 9 years old
U12	10 – 11 years old

The major non points racing program is the **Entry Level series** for which the regulations and criteria are uniform across Canada with their own set of rules and criteria for children ages 6-11.

The Entry Level series is training and racing program designated to encourage children to ski race without subjecting them to intense competitive pressures.

Running in conjunction with the Entry Level series is the **Snow Stars Program** that develops skiing skills through games, exercises, drills and purposeful free skiing. Eight levels of skills are recognized and each youngster progresses through each skill at his/her own rate.

Masters Alpine Series:The **Master Alpine Series** is a program that provides an opportunity for adults of all ages to participate in a structured racing program. Races are held in each of the provinces as well as calendared National events.

1.5.2 POINT PROGRAMS

Age Group

Category	Age Group
National Points Races	
U14	12 - 13 years old
U16	14 - 15 years old
U18	16 - 17 years old
U21	18 – 20 years old

The above age groups are recognized across Canada and based on age as of Dec. 31:

The points program is one in which each competitor must possess a current ACA competitor card and number. The races are entered into the National Points system.

The card system has been designed to accomplish several objectives:

- To provide a national registration system for competitors;
- To provide a graduated points scoring system, the National Points list in each of the alpine disciplines.
- To provide a means to measure the performance of a competitor upward through national levels.
- To provide a record of all participants for insurance purposes.

Competitors may not race in ACA sanctioned events that are submitted for input to the national points list without a valid competitor card. ACA sanctioned events include all the races that appear on National and provincial race calendars.

Non-point and point programs are based on age categories. The age categories can be found on the ACA Points web site www.acapoints.ca

A point race is one in which each competitor must possess a current ACA competitor card and number. The races are entered into the National Points system.

The card system has been designed to accomplish several objectives:

- To provide a national registration system for competitors;
- To provide a graduated points scoring system, the National Points list in each of the alpine disciplines.

- c) To provide a means to measure the performance of a competitor upward through national levels.
- d) To provide a record of all participants for insurance purposes.

Races for carded racers exist at levels from provincial through to National and the F.I.S races. Competitor's starts at the "Zone" level or the divisional level depending on the province, followed by the provincial level then from there go through a series of higher quality races until eventually reaching their potential that may or may not be on a national team.

1.5.3 PROGRAMS WITH FIS POINTS

The FIS points system targets similar objectives of the National Points System but targets the international level of racer.

FIS Points Races

Category	Age Requirement [Age at December 31]
Junior FIS	Entry limited to U18
Regional FIS	U18 and older
National Champions Junior and Senior	
NorAm Series	
World Cup	
Masters FIS	Age 30 and older Sr Masters Men: Age 55 and older

2 OFFICIALS PROGRAM

2.1 ALPINE OFFICIALS PROGRAM

The National alpine officials program is a structured and integrated program consisting of four levels of Officials and four levels of Technical Delegates. The program stresses the integration of theory with practice at all levels. It seeks to provide the means by which Officials can build a broader and more knowledgeable base of experience and maintain that level of experience to maintain a level of expertise.

It is essential that Officials be able to provide race organization and exhibit officiating skills that will match the competitors' performance levels and program goals.

Competitors have the right to expect that Officials have a high level of expertise so that results reflect the athletes' ability and skills without being compromised by the incompetence of Officials or "luck".

The following are the basic criteria for certification of the various levels of alpine Officials across Canada as part of the National Officials program.

2.1.1 LEVELS OF OFFICIALS AND COURSE DESCRIPTIONS

The following list represents the minimum requirements. The PTSO officials chairpersons can establish higher requirements if desired.

For the purposes of certification, the various Officials positions are divided into the following categories.

Administration	Event Quality	Course	Timing	Jury
<ul style="list-style-type: none"> ▪ <i>Race Organizing Committee Chair</i> ▪ <i>Chief of Administration (Race Administrator)</i> 		<ul style="list-style-type: none"> ▪ <i>Chief of Race (jury member)</i> ▪ <i>Chief of Course</i> ▪ <i>Chief of Gate Judges</i> ▪ <i>Gate Judge</i> ▪ <i>Course Crew</i> 	<ul style="list-style-type: none"> ▪ <i>Chief of Timing and Calculations</i> ▪ <i>Chief of Timing</i> ▪ <i>Timer</i> ▪ <i>Starter</i> 	<ul style="list-style-type: none"> ▪ <i>Technical Delegate</i> ▪ <i>TD Candidate</i> ▪ <i>Referee</i> ▪ <i>Assistant Referee</i> <hr/> Jury Advisors <ul style="list-style-type: none"> ▪ <i>Start Referee</i> ▪ <i>Finish Referee</i>
<ul style="list-style-type: none"> ▪ <i>Secretary*</i> ▪ <i>Finance*</i> ▪ <i>Accommodation*</i> ▪ <i>Scoreboard*</i> 	<ul style="list-style-type: none"> ▪ <i>Chief of Event Quality*</i> ▪ <i>Chief of Ski Area Relations*</i> ▪ <i>Chief of Awards and Media Relations*</i> 	<ul style="list-style-type: none"> ▪ <i>Chief of Equipment*</i> ▪ <i>Chief Steward*</i> ▪ <i>Stewart*</i> 	<ul style="list-style-type: none"> ▪ <i>Calculator*</i> ▪ <i>Recorder*</i> ▪ <i>Finish Controller*</i> ▪ <i>Assistant Starter*</i> 	

Per the level descriptions below, experience in more than one category is necessary for completion of Level II, III and higher certification. Shaded positions do not qualify for Level III or Technical Delegate experience.

2.1.1.1 Level 1

This is the entry-level course. It is an overall introduction to race organization and the various Officials positions with particular emphasis on timekeeping and gate judging. There are no course pre-requisites or required experience. Participants will benefit more if they have practical experience.

Course attendance automatically qualifies the participant as Level 1 Official. Parents of entry level and U-12 level racers find this course an excellent introduction to race officiating and in gaining an insight into the racing program as a whole.

Course Description:

- Time required: 3 hours
- Course fee: set by PSO Officials Chair – includes manual, Officials pin
- Pre-requisites: None
- Exam: None

Pre-requisites for Level 2 certification:

- Level 1 certification
- Practical experience in a point race **since obtaining Level 1** as follows:

At least three **different** positions taken from any two different categories: *Administration, Event Quality, Course, Timing or Jury* covering at least 8 race days.

For example:

2 days as Gate Judge, 2 days as a Recorder, 2 days as a Starter, and 2 days in any other or any of the same positions would cover the qualifications for a Level 2 certification.

2.1.1.2 Level 2

This course is designed as a detailed informative course to ski racing and the roles and duties of various Officials positions. It is a fairly intensive course that does not repeat the material covered in Level 1 and does require some prior knowledge and experience in order that the material covered is absorbed to the best advantage.

Course Description:

- Time Required: 9 hours including a 1 hour exam. May be done in one day or two evenings.
- Course Fee: Set by the PSO Official Chair – includes course manual, Officials pin
- Pre-requisites: Level I certification and practical experience in at least 3 different Official's positions from 2 different categories that covers a minimum of 8 days race experience.
- Exam: 1 hour – multiple choice, T/F, and short answers. Open book.

2.1.1.3 Level 3

Pre-requisites for this course are Level II certification and practical experience **since obtaining Level 2** as follows:

- a) Chief of Race and one of the following positions:
 - Chief of Course
 - Chief of Timing and Calculation
 - Chief of Gate Judges
 - Chief of Administration (Race Administrator)
- b) Two assignments as voting/non-voting jury member (other than Chief of Race);
- c) An assignment different from the above at the FIS level excluding the positions with an asterisk on previous page.

The candidates have to attend a Level 3 course and pass the exam.

Course Description:

- Time required: 12 hours. Generally given on a weekend but can be given over 4 evenings.
- Course fee: set by PSO Officials Chair. Includes manual and course material, Officials pin
- Pre-requisites: It is only open to those who have the necessary pre-requisites as detailed above or are identified as being very close to having the necessary practical. Must be recommended by the PSO Officials Chair.
- Exam: 2 hour open book exam.

The Level III course is an interactive one in which there is emphasis on discussion and exchange of ideas, opinions, and experiences by the participants and the instructor(s).

The course is designed for Officials with considerable practical experience. It covers rules to particular disciplines as well as the work and duties of the Jury and Technical Delegate in detail. Also covered are the duties of senior Officials, course preparation, maintenance and setting, as well as calculations of points and penalties. Throughout the course, participants take part in many case studies taken from actual experiences and will be asked to make decisions on these as well as participating in Jury decisions.

2.1.1.4 Level 4

In order to become a Level 4 Official, it is necessary to be recommended to the National Officials Committee by the PSO Officials Chair. Level 4 Officials are the most experienced Officials, having showed a superior level of ability. Among the qualifications required of a Level 4 Official are: Level 3 Official with the minimum practical experience in each of the following since obtaining Level 3 certification:

- a) Satisfactory performance of the Chief of Race's duties at the FIS level.
- b) Assignment as voting or non-voting Jury member at a race minimum National or provincial level, or at a regional speed event.
- c) Satisfactory performance at a U18 and/or FIS level:
1 event assignment as: Chief of Course or Chief of Gates
event assignments out of: Chief of Administration, Chief of Timing and Calculations or Race Chairman.

2.1.2 COACHES ADMISSION IN THE OFFICIALS PROGRAM

All Canadian Ski Coaches (CSCF) Entry Level (Certified) and higher can attend the Level 2 Officials course without any other criteria of eligibility.

Pre-requisite for Referee –CSCF certified at the level appropriate for the level of competition and at least completion of the CSCF Rules and Regulations for Coaches module or the Level 2 Officials course.

2.1.3 OFFICIALS RECOGNITION AND IDENTIFICATION

All officials will receive a national pin in recognition of their achieved level.

2.1.4 OFFICIALS REQUIREMENTS TO MAINTAIN CERTIFICATION

Certified Officials must be a member of ACA to maintain their certification.

Upon qualification, the initial period of certification and practical requirements to maintain certification for each Officials level is as follows:

Level 1	Three years	Activity as an Official
Level 2	Three years	Work minimum 4 race days in a 3 year period and an Officials Update every 2 years.
Level 3	Two years	Work minimum 4 race days a year and an Officials Update every 2 years.
Level 4	Two years	Work 4 days a year as a TD or Chief level or to the satisfaction of the Officials Chair. Attend an Officials Update every 2 years.

2.2 ADMINISTRATION OF NATIONAL OFFICIALS PROGRAM

The Officials program is managed and maintained by the National Officials Committee. The Committee includes: the National Officials Chair, two Directors-at-Large and PSO Officials Chairs from Alberta, British Columbia, Canada District, Ontario and Quebec.

Canada District represents Saskatchewan, Manitoba, Yukon, New Brunswick, Nova Scotia, Newfoundland/Labrador, Prince Edward Island and the North West Territories.

Each PSO Officials Chair maintains records of all Officials in their region. The Officials record shows the activity of an Official, i.e. what races he/she works at and the positions held, what courses he/she has attended, and his/her background on becoming an Official. The record sheet also keeps track of maintenance requirements, when an Official becomes eligible for advancing to the next level and when the present certification expires.

2.2.1 REQUIRED QUALIFICATIONS TO BECOME A COURSE CONDUCTOR

The following criteria are required for each level of training:

- Level 1:** Level 3 Official or Level 2 Official with 3 years experience approved by the PSO Officials Chair.
- Level 2:** Level 3 Official with 3 years experience approved by the PSO Officials Chair.
- Level 3:** FIS, National or PSO Technical Delegate with 2 years experience approved by the PSO Officials Chair.

2.2.2 TECHNICAL DELEGATES

The Technical Delegate (TD) is the person who has advisory control over pre-race and race operation and together with other members of the Jury, has complete control over the competitive operation of the race. He/she has the final decision in all matters of racer protection and the Jury has the authority to cancel, postpone or annul the race if necessary. In all cases, the TD is the representative of the governing body by whom he/she is appointed.

2.2.3 TD LEVELS AND CRITERIA

A TD must have a broad working knowledge and experience as an Official and have demonstrated an ability to handle a variety of on-hill situations in a calm and knowledgeable manner. The requirements for certification at the various levels are:

- a) Regional Technical Delegate (only in Ontario)
 - Level 2 Officials Certification.
 - Recommended by the Divisional and PSO Officials Chair
- b) PSO Technical Delegate – Technical (T)
 - Level 3 Officials Certification.
 - Recommended by the PSO Officials Chair for TD certification.
- c) PSO Technical Delegate – Technical/Speed (T/S) -
 - Level 3 Officials Certification.
 - Certified in both Technical and DH and SG events.
- d) National Technical Delegate
 - Level 4 Officials Certification preferred
 - Licensed Divisional TD (T) &/or (T/S) or FIS TD
 - Recommended by the PSO Officials Chair to the National Officials Committee
 - Nominated National Technical Delegates will receive a Level 4 Certification.

The minimum criteria to be assigned as a Divisional/PSO or National Technical Delegate are the following:

- Regional technical race: Level 2
 - PSO technical race and speed event: Level 3
 - National race events: Level 4.
- e) FIS Technical Delegate
 - The first step in entering the FIS TD program is nomination by National Official, the PSO Officials Chair, the PSO President and a FIS Technical Delegate then a recommendation by the National Officials Committee to the FIS Commissioner of Canada. A National education review program is provided for FIS Technical Delegate applicants. If accepted the applicant follows the program outlined in ICR 602.

3 WHAT IS A SKI RACE?

Any ski race is a competition in which racers ski through a set course and the time they take is recorded. The winner is the racer who has the shortest time to correctly pass through the course.

This statement belies the organization and experience needed to stage most races but the principle is the same for all – the fastest racer with the correct passage wins.

For all races, there are three principle groups of Officials on the course necessary to conduct a race

At the start: Officials must be able to accurately time when a competitor leaves the start and ensure that it is done according to the rules.

Along the course: Officials must ensure each competitor correctly passes through the gates and the course is properly set up and maintained.

At the finish: Officials must accurately record the time of the finish for each competitor and ensure it is done according to the rules.

Other essentials, common to all races include:

- That the course is prepared and the track is laid out in advance of the competition.
- There must be competent personnel to do all the documentation prior to the race and produce the results.

3.1 TYPE OF RACE

Alpine racing has seven main types of events:

- Slalom
- Giant Slalom
- Downhill
- Super G.
- Alpine Combined
- Kinder Kombi
- Ski Cross

In addition, there are variations of Slalom events such as single pole SL event and parallel events

Relative course layouts and technical criteria of are outlined further in the document.

3.1.1 SLALOM (SL)

In Slalom, the competitor must follow a tight course defined by pairs of single poles called “gates”. A slalom race is normally held on a short but steep hill.

Racing is mostly down the fall line. The most important types of gates and combinations of gates are: open gates, closed vertical gates, vertical combinations, hairpin-combinations and delay turns.

The gates are narrow (4 to 6 meters in width).

The distance between gates within combinations (hairpin & vertical) may not be less than 0.75 m. The distance from turning pole to turning pole of successive open or closed gates may not be less than 6m, not more than 13m with the exception for U14 and U16 ~ not more than 12m.

Delay turns must have a minimum distance of 12 m and a maximum distance of 18 m from turning pole to turning pole.

Considerable turning skills are required by the competitor to safely negotiate the SL course.

A slalom course must contain horizontal (open) and vertical (closed) gates as well as a minimum and maximum number of vertical combinations consisting of three or four gates, a specific number of hairpin combinations and should contain a number of delay turns. The number of vertical combinations, hairpin combinations and delays depend on the age level of the competitors.

A good slalom course allows a racer to combine speed and a wide variety of technical skills and ski technique.

Use of 155cm length U14-specific gate stock is strongly recommended for U14 and younger events.

3.1.2 SINGLE POLE SLALOM (SL)

The rules regarding combination of gates and distances between gates, number of combinations and delays remain the same but the course is set using no outside poles with the following exceptions:

1. First and last gate must have outside as well as a turning pole.
2. Combinations (hairpin, vertical) and delay gates must use “outside” poles.

The typical slalom gate combinations are illustrated on the following page.

Figure 1 – Slalom gates combinations

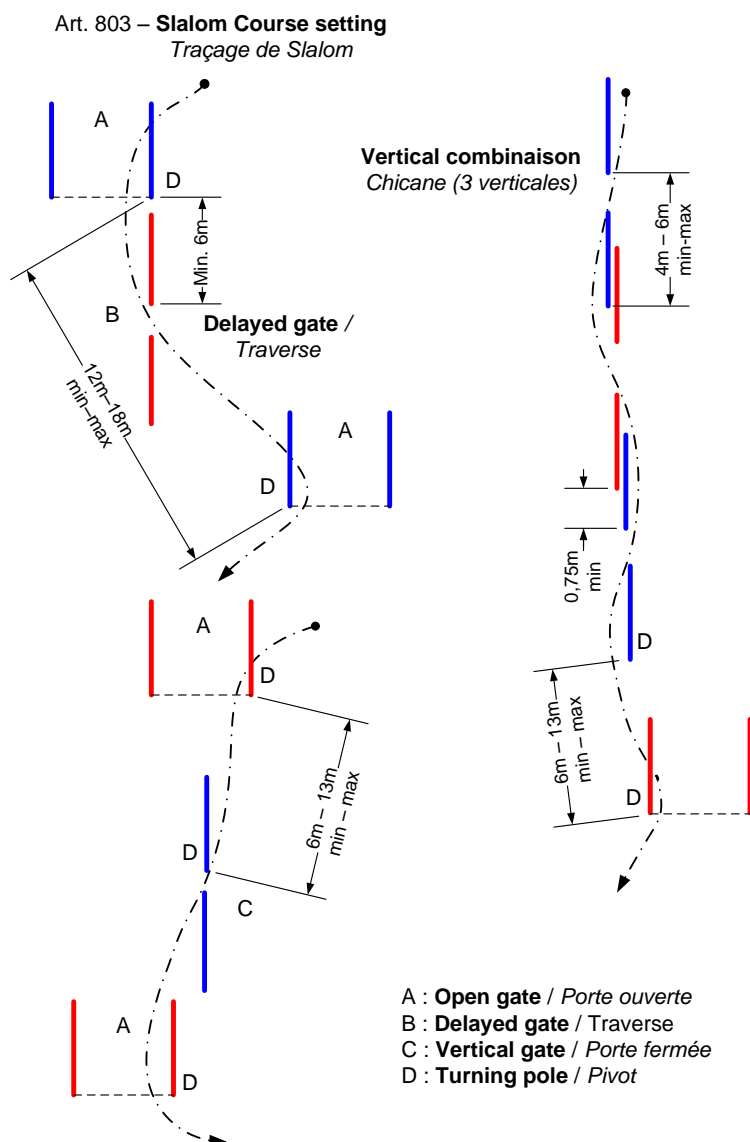
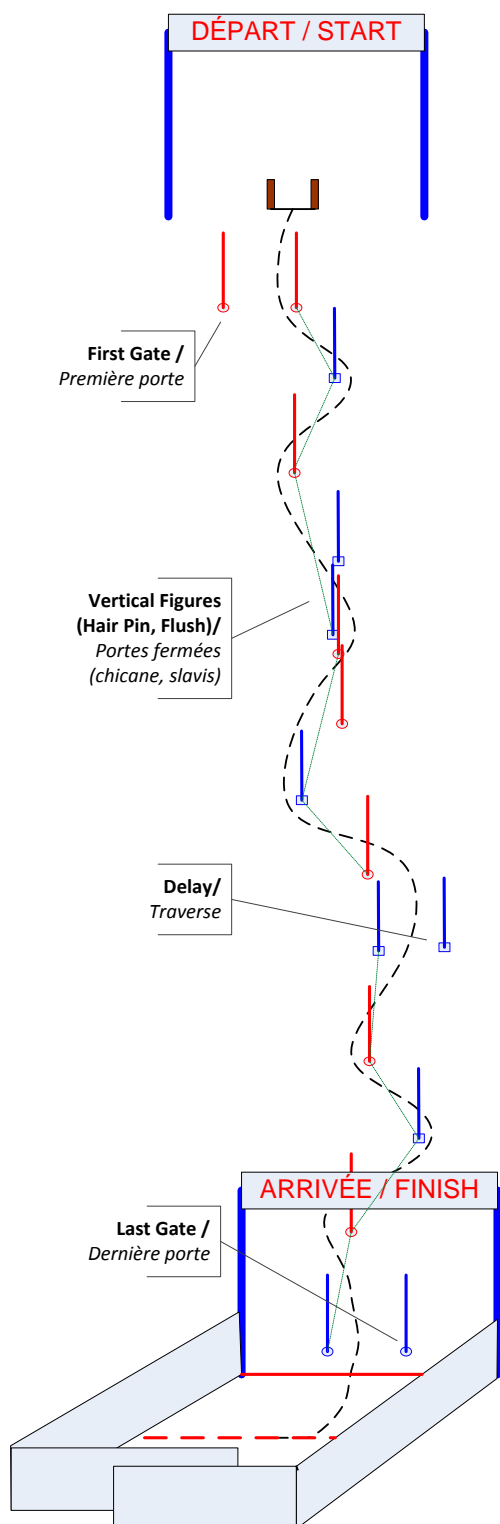


Figure 2 – Single Pole Slalom

Outside pole required for first gate and last gate, combinations (hairpin, vertical) and delay gates.



WOMEN 120 TO 200m FIS, NOR-AM
 140 TO 220m OG, WC
 # OF GATES 30% - 35% OF VD +/- 3 DIRECTION CHANGES

MEN 140 TO 220m FIS, NOR-AM
 180 TO 220m OG, WC
 # OF GATES 30% - 35% OF VD +/- 3 DIRECTION CHANGES

ENL 80m – 120m WOMEN 80m – 140m MEN
U-14 MAXIMUM VERTICAL 100 m
U-16 MAXIMUM VERTICAL 160 m
 NUMBER OF DIRECTION CHANGES: 32 – 38% +/-3

FIS HOMOLOGATION: 10 YEARS

WIDTH OF COURSE: 40m FOR 2 COURSES

3.1.3 DOWNHILL (DH)

In this competition, the racer must demonstrate excellent skiing technique, agility, concentration, marked endurance and physical fitness as well as courage at high speed. The downhill course is the longest in alpine skiing competitions. The vertical drop varies from 500 m to 1100 m., the terrain is varied and the gates are set to control and to direct the racer instead of demanding turning techniques. There are no gate combinations and the gates are wide and open to the racing line. Thus, speed is significant and safety measures must be taken to ensure the racer is protected in case of a fall. Training runs are obligatory before the competition.

3.1.4 GIANT SLALOM (GS)

This is a race event combining both slalom and downhill characteristics. The course is moderately long and preferably undulating and hilly with a vertical drop between 250 to 450 m. Turns are a variety of long, medium and short turns set considerably faster than Slalom but still not approaching the speed of Downhill. The gates are set further apart than in Slalom but are needed to control the speed as well as to demonstrate the turning skills of the racer. The gates in Giant Slalom are double-pole gates, as in the Downhill, however with smaller flags and alternating colors between blue and red.

3.1.5 SUPER-G (SG)

Super G derives its name from Super Giant Slalom implying that the course is both longer and faster than the regular giant slalom. Speed in some straighter stretches of the course may equal those of Downhill speed. The gates are set so they require more turning technical skills than in the Downhill but less than in the Giant Slalom. The Super G is a hybrid between Downhill and Giant Slalom. Because the speeds reached are high, the course is often traced on a course used for Downhill; however with a lower start position because the necessary installations to ensure the racers safety are the same. Flags alternate red and blue in color

3.1.6 ALPINE COMBINED (AC)

The Alpine Combined event is the result of a Downhill or Super G run and a single Slalom run held according to the technical regulations for Slalom and those for DH or SG. The Alpine Combined event consists of two runs. In FIS events the DH and Super G of the Alpine Combined must be held on specifically homologated for DH or SG courses respectively. The Slalom may be held on these courses.

The finish results of the DH or SG are reversed for the SL start order

If possible both runs should be held on one day.

Figure 3 – Downhill

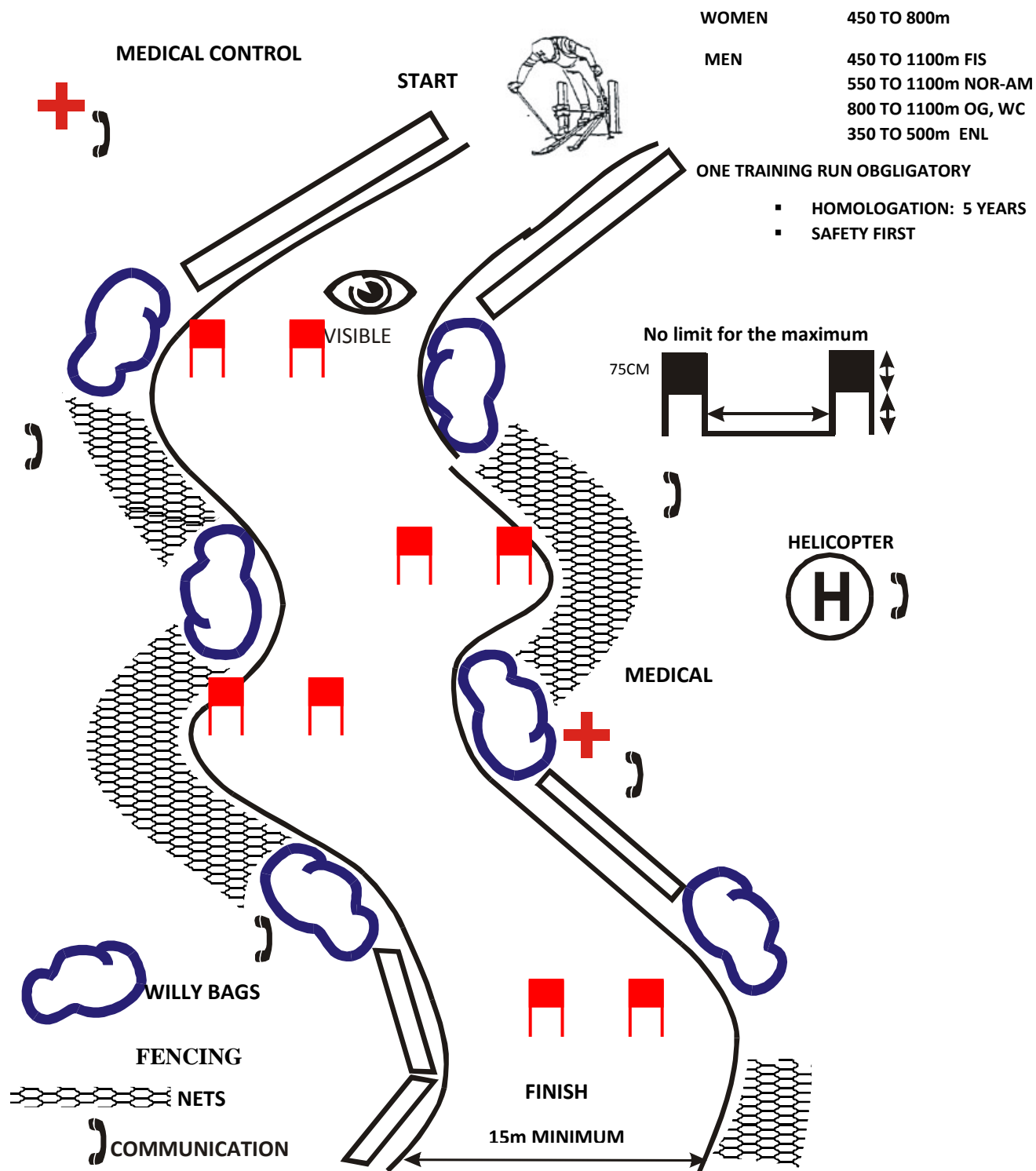


Figure 4 – Giant Slalom

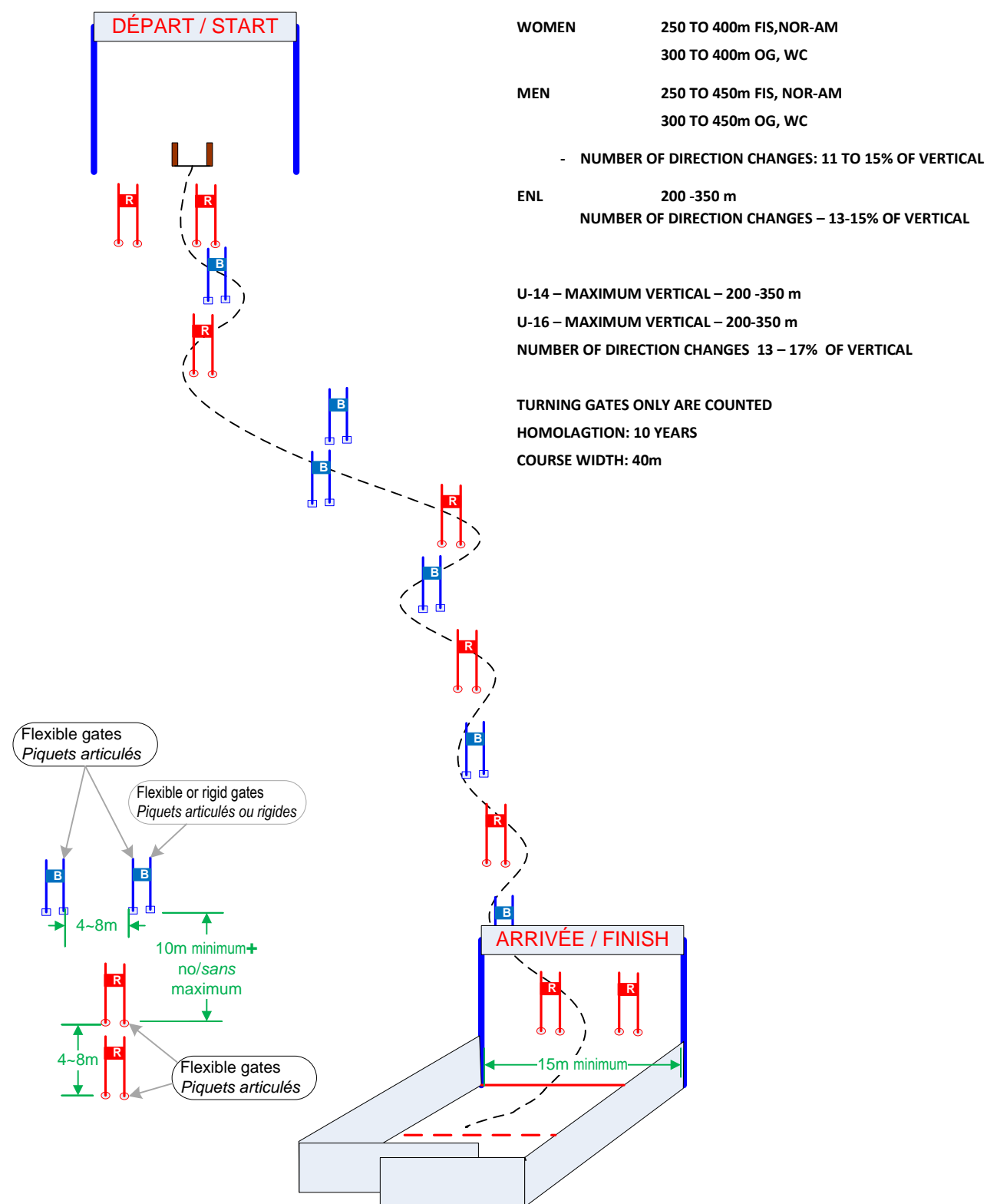
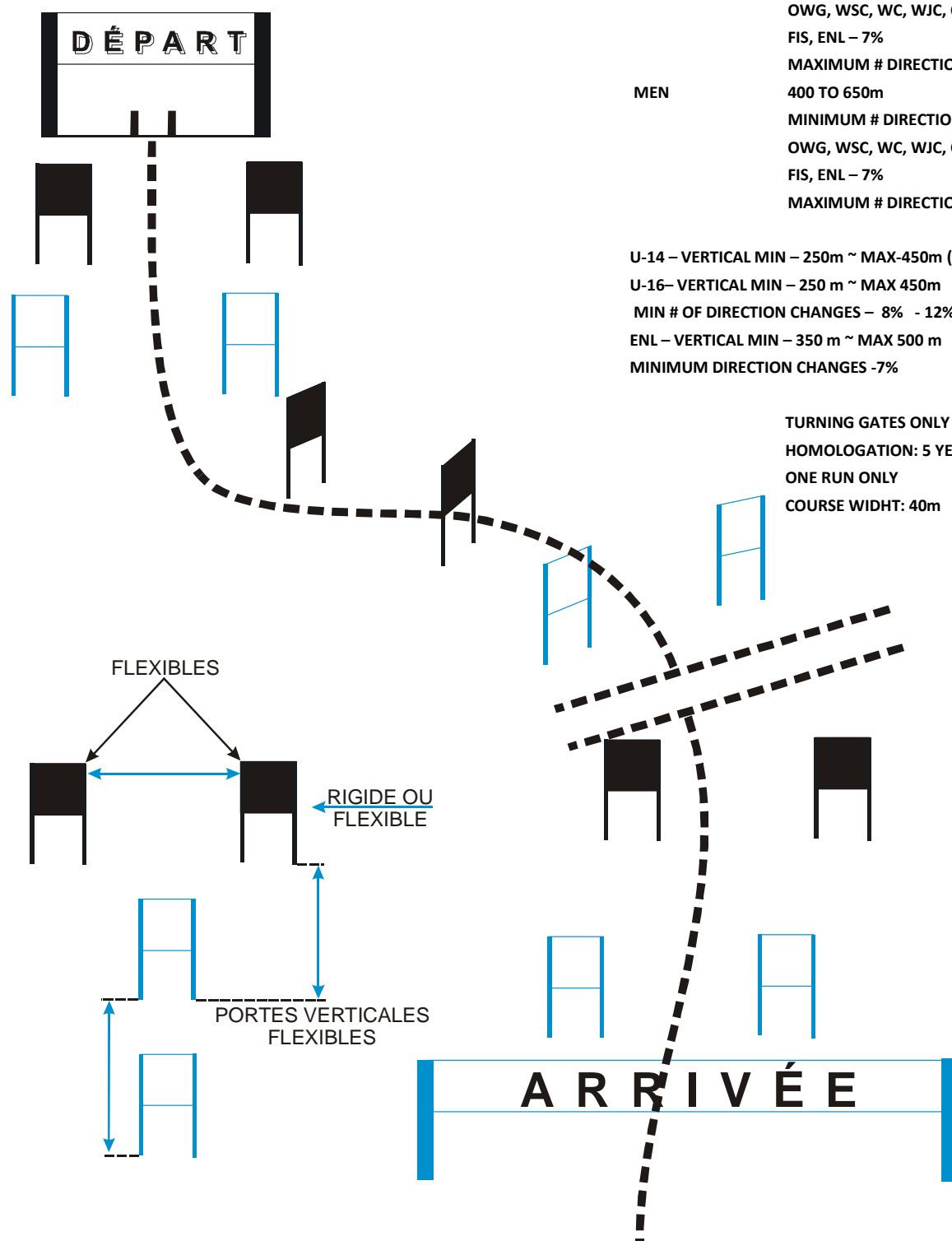


Figure 5 – Super G



WOMEN

350 TO 600m FIS, NOR-AM

400 TO 600m OG, WC

MINIMUM # DIRECTION CHANGES:

OWG, WSC, WC, WJC, COC – 6%

FIS, ENL – 7%

MAXIMUM # DIRECTION CHANGES: 10%

MEN

400 TO 650m

MINIMUM # DIRECTION CHANGES:

OWG, WSC, WC, WJC, COC – 6%

FIS, ENL – 7%

MAXIMUM # DIRECTION CHANGES: 10%

U-14 – VERTICAL MIN – 250m ~ MAX-450m (ICR 1001.1.3)

U-16 – VERTICAL MIN – 250 m ~ MAX 450m

MIN # OF DIRECTION CHANGES – 8% - 12%

ENL – VERTICAL MIN – 350 m ~ MAX 500 m

MINIMUM DIRECTION CHANGES - 7%

TURNING GATES ONLY ARE COUNTED

HOMOLOGATION: 5 YEARS

ONE RUN ONLY

COURSE WIDTH: 40m

3.1.7 Kinder Kombi (KK)

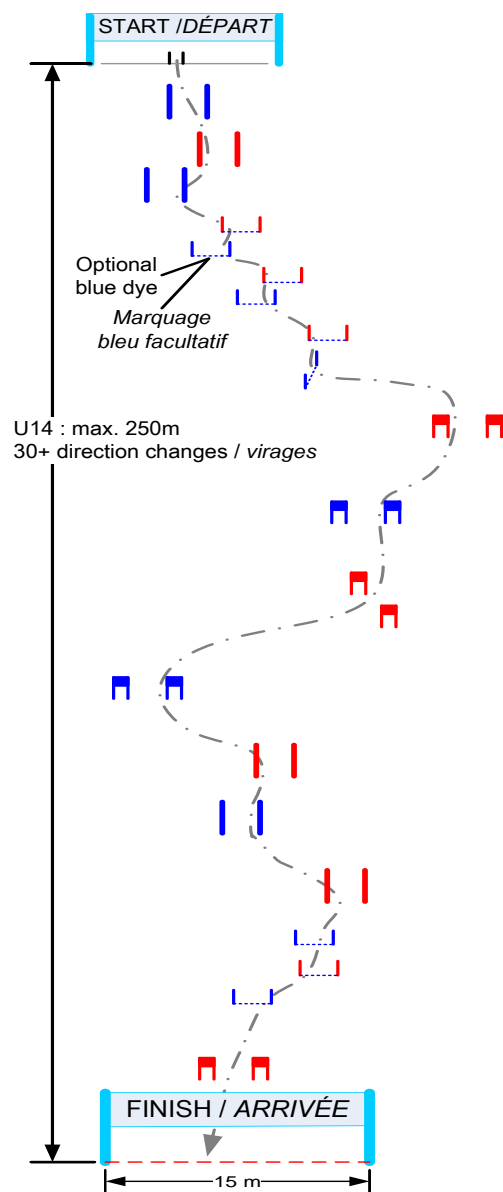
Kinder Kombi consists of a mixture of standard turns and gates creating tactical awareness by blending sections of different gates in a flowing, rhythmical, constantly changing pattern. KK meets the development needs for the K1 age group.

There are 2 different forms of the Kombi: SL/GS Format (technical orientation) setting with stubbies, SL gates & GS gates and GS/SG Format (speed orientation) setting with GS & SG gates.

The course should test the skier's ability to react and adapt to an ever changing rhythm and radius, but be designed to allow the competitors smooth transition between the various sections of gates.

The entire slope and natural terrain should be utilized and skiing as often as possible across the fall line is recommended. It is not recommended to use vertical combinations for SL flushes. Gates which impose on competitors too sudden or sharp braking should be avoided. The first few gates and last few gates should lead the skier comfortably.

Figure 6 – Kinder Kombi



SL/GS KOMBI

GS SLOPE ~ VERTICAL DROP BETWEEN 140 - 200m
 MIXTURE OF GS, SL & STUBBY GATES ON THE SAME
 COURSE MINIMUM # OF DIRECTION CHANGES – 30
 RECOMMENDATION TO HAVE A MINIMUM OF 5 DIFFERENT SECTIONS
 SLALOM SKIS ARE RECOMMENDED
 TURNING GATE TO TURNING GATE:
 SL TURNING GATE DISTANCE – MIN 0.75m MAX - 12m
 SL GATES DISTANCE : MIN 4m – MAX 6m GS TURNING GATE DISTANCE ~ NO MINIMUM
 GS TURNING GATE DISTANCE - MAXIMUM 20m
 GS GATES DISTANCE: MIN 4m – MAX 8m
 SLALOM & GIANT SLALOM RULES APPLY FOR RUNNING THE KOMBI RACE EXCEPT AS MODIFIED IN ICR 608

GS/SG KOMBI

GS SLOPE ~ VERTICAL DROP – 250m MAXIMUM
 NUMBER OF DIRECTION CHANGES – 10 12% of VD
 RECOMMENDED TO HAVE 3 – 5 DIFFERENT SECTIONS
 GIANT SLALOM SKIS ARE RECOMMENDED

GS GATES DISTANCE : MIN 4m - MAX 8m
 GS TURNING GATE DISTANCE: MIN 10m – MAX 20m
 SG GATES DISTANCE: MIN 6m – MAX 8m
 SG TURNING GATE DISTANCE: MIN 15m – MAX 28m

SUFFICIENT NUMBER OF GATE JUDGES SHOULD BE PRESENT>
 FOR THE STUBBY SECTION IT IS RECOMMENDED TO HAVE ONE GATE JUDGE FOR

EVERY 2 GATES

3.1 3.2 RACE COURSE COMPONENTS

There are three (3) main areas of the race course: Start, Course and Finish.

3.2.1 START

The Warm up area is an area delimited by rope or fencing provided for the convenience of the racers and their coaches so they can prepare for the race without interruption.

The Start Area must be large enough to allow the racer to stand relaxed at the starting line. It must also be large enough to contain the racer, any required Officials and the competitor's coach.

The Start Ramp must have an angle of approximately but not greater than 45 degrees, steep enough to give the racer rapid acceleration. If needed, the ramp can be iced using salt and/or water. A shovel is an essential tool for the constant maintenance of the start ramp.

The Start Gate consists of two posts (4"x4"), which mark the start line. They should be solidly anchored and iced in place. Also, a solid base should be provided for the racer to stick his ski poles in front of the start gate. The racer's feet must stay behind the starting line until the start signal is given.

The start wand is mounted on the posts set approximately 60 cm apart and not greater than 50 cm above the snow line. The wand itself should be placed approximately at mid calf height of the average racer.

The following Officials must be present at the start:

The Starter: is the person responsible for giving the correct start signal to each racer. In collaboration with the Chief of Timing, the starter must make sure of the accuracy of the start interval between signals.

The Assistant Starter: is responsible for calling the racers to the start area in the correct starting order.

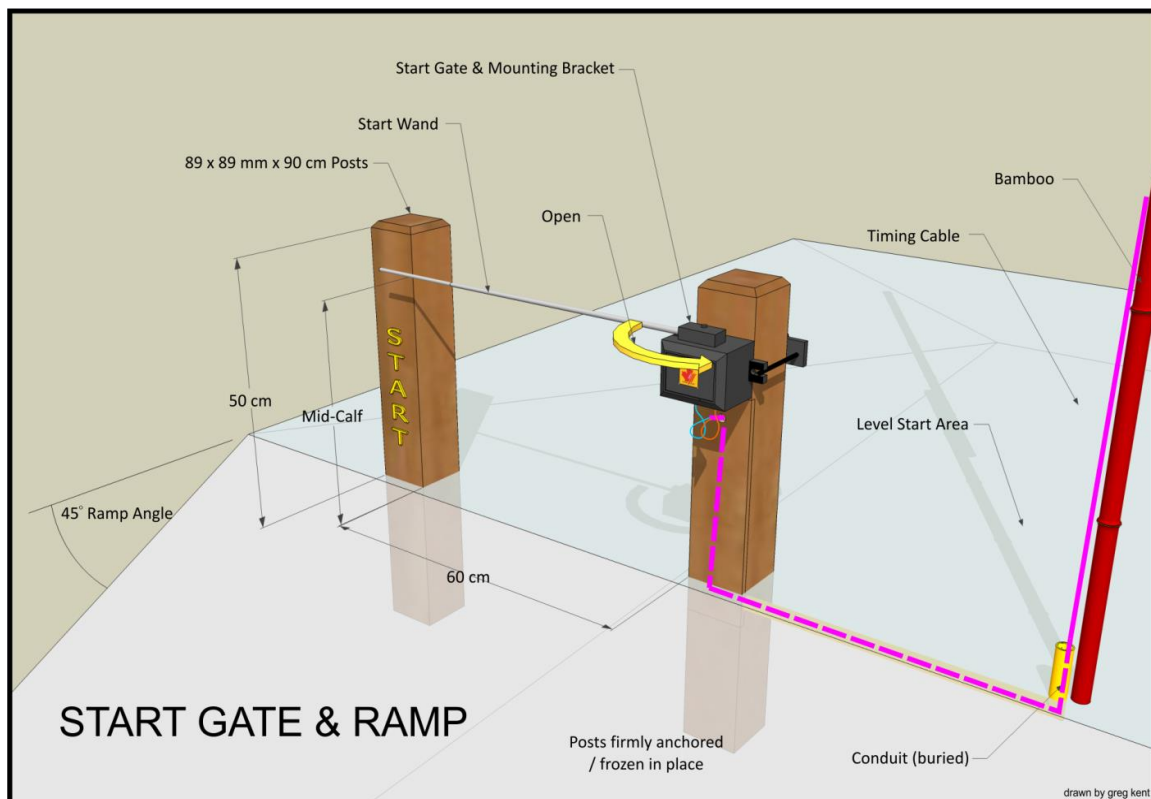
Start Referee: makes sure all racers start according to the established rules, have the required equipment and the physical and psychological capacities to race, has reserve bibs at the start and is at the start from the beginning of inspection until the end of the training/event.

The Manual Timer: times and records the precise starting time using time of day timing (hand timers). The way to do it is described in detail in the section 4.4.6.

The start intervals are as followed:

GS, DH, SG	SL
10 SECONDS	RACER READY
(9)	GO
(8)	
(7)	
(6)	
5	
4	
3	
2	
1	
GO	
Can go 5 seconds before and up to 5 seconds after "GO"	Must go within the 10 seconds following "GO"

Figure 7. Start Area



3.2.2 COURSE

A well-prepared course is essential for a good race. The more firmly and uniformly packed the snow is, the better the course will be. An area used by recreational skiers usually provides a good base to work with and the moguls can be easily be removed prior to the event. The amount of time and effort assigned to course preparation will depend on the manpower available as well as the cooperation and assistance from the ski area operators.

Before race day, the snow on the course must be made as firm and smooth as possible. Under most conditions, it will take at least 12 hours for re-worked snow to set properly.

Planning and cooperation with the area personnel are essential for getting a well-prepared course. In order to ensure fair conditions for all racers, sufficient and proper course maintenance is required throughout the race. The better the pre-race preparation has been, the easier the course maintenance will be during the race.

As with all other race operations, course maintenance is easier, more enjoyable and more effective if it is properly organized and there is good leadership and coordination. Course crew rotation on the course is generally the most successful.

A knowledgeable course leader should lead the crew. Essential equipment for course maintenance to correctly upkeep the course include rakes, shovels, drills, poles, gate keys and a tiger torch, to name a few.

For all races, a course must be set. This is done by a **Course Setter** who is experienced in ski racing and both trained and competent to set a course. In Slalom, the course should require precise skiing but at a level where the majority of racers can complete it successfully. In Giant Slalom, the course must be flowing, with a good rhythm and down a not too steep hill in order to get the racers down with controlled speed. Setting for Downhill and Super G requires an excellent understanding of the terrain involved, of the potential for safety equipment and the safe control of speed.

The Course Setter is a very important person. Good course setting can make the race enjoyable for all participants, with a high completion rate. No one appreciates a race, which is technically too difficult for the competitor.

Ideally, the course should be set the day before the race to allow enough time to complete preparation, including flagging, numbering and the dyeing of the gates on race day.

As mentioned earlier, the racer must correctly pass through the gates down the course. Individuals who decide if a racer has correctly crossed the gate line are the **Gate Judges** who are positioned along the course, in strategic positions that allow them to evaluate whether racers properly passed through each gate. It is a very important role whose duties are described in Section 4.4.8.

The Ski Cross Course:

Please refer to the FIS SX Course manual information for the requirements of a Ski Cross course. (Section 6.0). The start area is quite different. The finish area is much like the finish area for all alpine ski races events. However, as discussed only the initial qualification round is timed.

The Para-Alpine Course:

Please refer to the para-alpin section of the handbook for specific information relating to the requirements of a para-alpine course (section 7.0).

3.2.3 COURSE PREPARATION

A well prepared race surface is essential to the execution of a good race. The surface should be groomed evenly and firmly. Runs used by recreational skiers are usually provide a good base on which ruts and mounds can be easily be leveled. This work is usually carried out by the operations staff of the mountain with the equipment at their disposal.

Planning and cooperation with operations staff is essential for a good preparation of the race surface. It is preferable to the race track cure/harden about 12 hours after it has been worked. Grooming and leveling of bumps should therefore be made to permit sufficient curing time, e.g. the afternoon or evening prior to the race. For SX, preparation should be performed a few days in advance under the supervision of a person trained in SX course building.

To ensure adequate and fair conditions for all competitors, it is necessary to maintain the surface throughout the race. To this end, the persons responsible for maintenance of the course must be well prepared, well organized and well managed. Deployment of maintenance teams along the race course under the direction of a team leader is usually a guarantee of success. Essential tools for the maintenance of the course are: a shovel, a rake, a small mallet, wooden wedges, a drill, a gate key and spare gate poles.

For all races, course setting is carried out by a course setter under the supervision of the Jury (primarily the Referee). The course setter will take the level of the competition and the mean level of skill of the athletes participating into consideration. Ideally, the course setter will make the course sufficiently challenging for all participants and also provide a high percentage of success. Nobody appreciates a race that is too difficult for the majority of the entries.

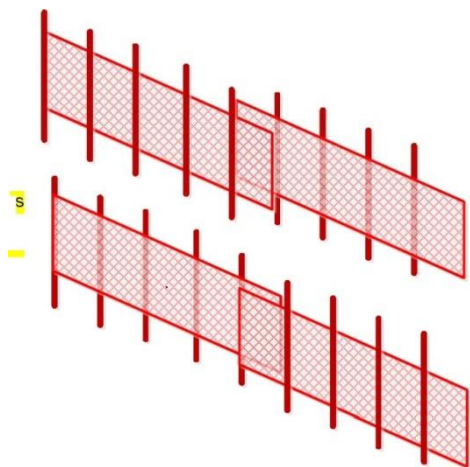
Courses are to be race ready before inspection by the athletes (flagged, numbered and dyed)

3.2.4 PROTECTION

In addition to good preparation, runway must have safety nets for skiers. Several types of protection mode exist but in this introductory course we will focus on! Installation nets B (A-net) which are used in the regional tests.

Refer to the manufacturer's directions about the specifics of net installations. In all cases, some basic principles must be respected.

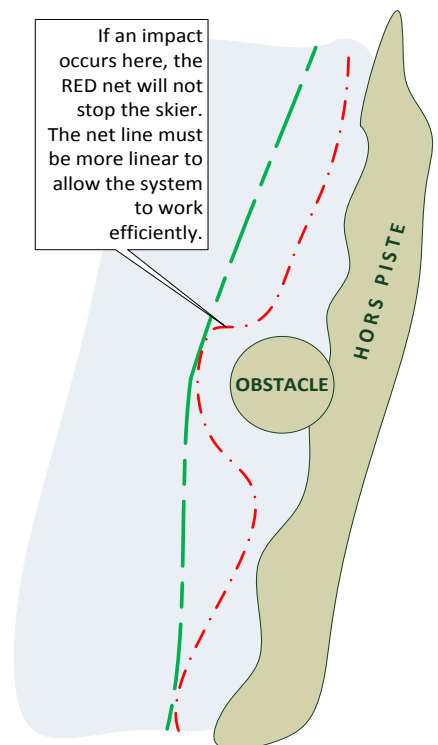
- Poles should be planted in the hardened/firm snow



snow surface.

- The distance between two lines of nets should be at least two meters (length of a pole). However, in confined spaces distances may be 0.5 meters.

- Sections must be overlapped such that downhill section start behind the end of uphill sections.
- Net tightness varies by manufacturer: Barry Cordage brand nets are to have a slight bagginess in appearance while Alpina brand must be tensed. There are differences in how sections are threaded/knitted together. The bottom edge should be slightly draped at the



- No equipment or clothing is to be hung or draped on the system, including timing or communications wiring.
- Do not allow spectators too close to the net. When impacted, the net will stretch as it decelerates the athlete. If needed, install crowd control netting to create a 4m – 6m ‘no-man’s’ zone behind the b-net system.
- Do not combine the systems of different manufacturers in the same line.

3.2.5 FINISH

- A typical finish area is illustrated in Figure 9.
- Set up of finish area is illustrated in Figure 10.
- Finish timing equipment is illustrated in Figure 11.

The preparation of the finish area is also very important. The run out area must be large and its surface must be firmly and smoothly packed as the racer is coming through the finish line at a high speed.

The finish posts (maximum 2"x2" cut at 50 %) on which timing beams and finish banners are fixed and must be well padded. Willie bags, insulation bales or hay loosely packed may be used for protection.

Hay bales are forbidden.

The Finish Area must be fenced to protect the racer against the intrusion of the spectators, skiers, animals, etc. The scoreboard must be located out of the way of the finishing racers. Note that the last gates are set up in a way to direct the racer towards the center of the finishing line.

The Officials at the finishing line are:

Electronic Timer:	Is responsible for the electronic timing and recording all the racers’ times.
Manual Timer: Recorder:	Times and/or records the exact finishing time using time of day timing. The procedure is described in details in the Section 4.4.5.
Bib Collector:	Collects bibs from the participants at the end of the race.
Finish Referee:	Stands in the Finish Area, downhill from the finishing line; makes sure that all racers cross the finishing line in accordance to the rules; on 2 skis, 1 ski or no ski; notes on his/her start list racers who have crossed the finishing line; clearly notes, racers who have not crossed the finishing line (DNF); clearly notes, the disqualified racers for their irregularity in the crossing of the finish line (DSQ); can disqualify a participant who has committed an irregularity in the last gates before the finish; receives requests for reruns, makes sure that the participants have a sportsmanlike conduct in the Finish Area. Supervises the finish controller, the timing and the crowd control in the finish area
Scoreboard Operator:	Posts the unofficial times of each racer on the scoreboard as soon as they are known.
Finish Controller	Supervises the section between the last gate and the finish Supervision of the proper crossing of the finish line Recording of the order of finishing of all racers who complete the course

The finish posts holding the finish banner must be not less than the minimum distances for each respective discipline:

<u>Discipline</u>	<u>Minimum Finish Line Width</u>
Downhill	15m
Slalom	10m
Giant Slalom	15m
Super G	15m
Kinder Kombi	15m

Figure 9 – Finish Area

FIGURE 3.7 - L'AIRE D'ARRIVÉE

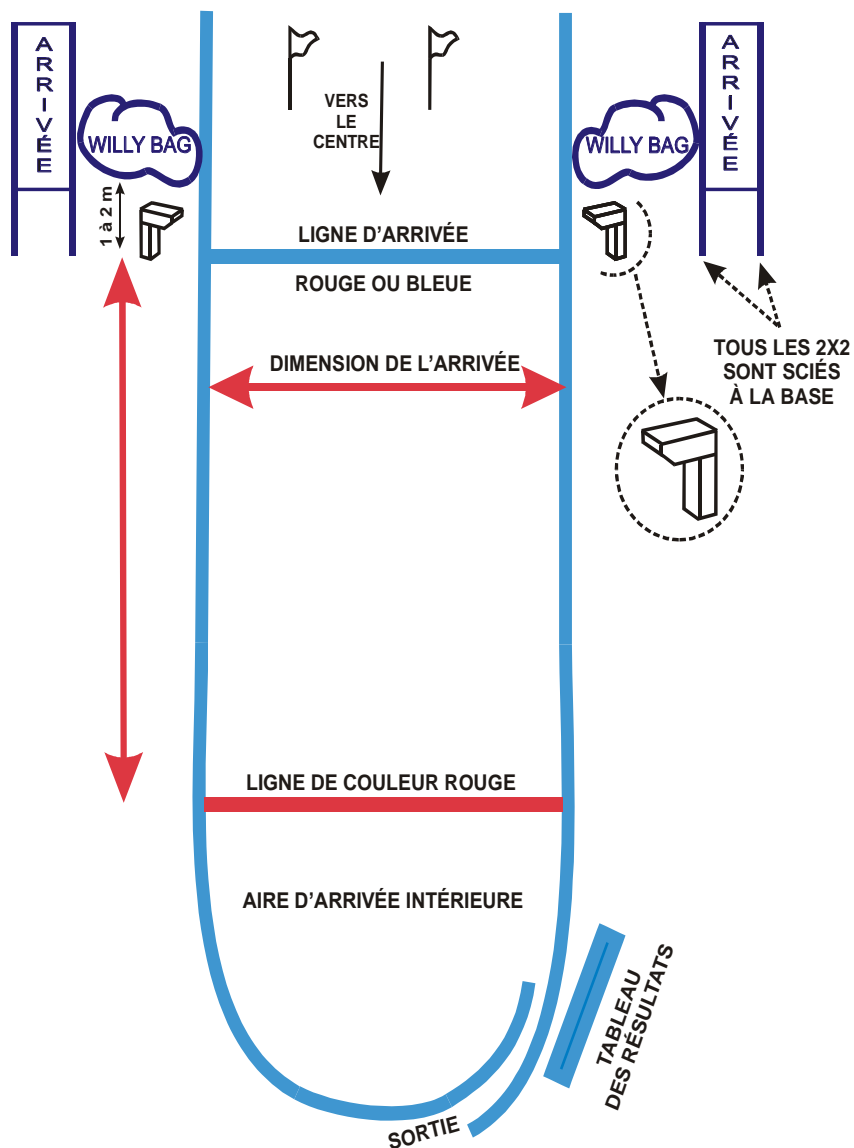
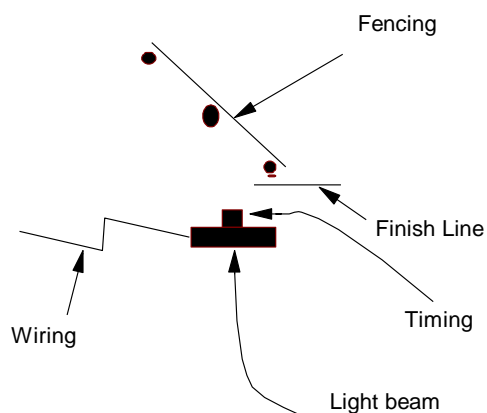


Figure 10 – Finish Area Set-Up



The finish timing equipment is mounted on posts at the finish line and some points must be observed:

1. The posts should be cut or pounded into the snow so they are no higher than necessary.
2. The post should be at snow level almost all the way through on the uphill side so if the skier does impact them, the post will break. See Figure 12.
3. Berms can be built in front of the posts with snow, so the skier will hit the snow rather than the posts. The berms are sloped/tapered to provide a gentle bump that skiers can slide over.

Figure 11 – Finish Area Set-Up

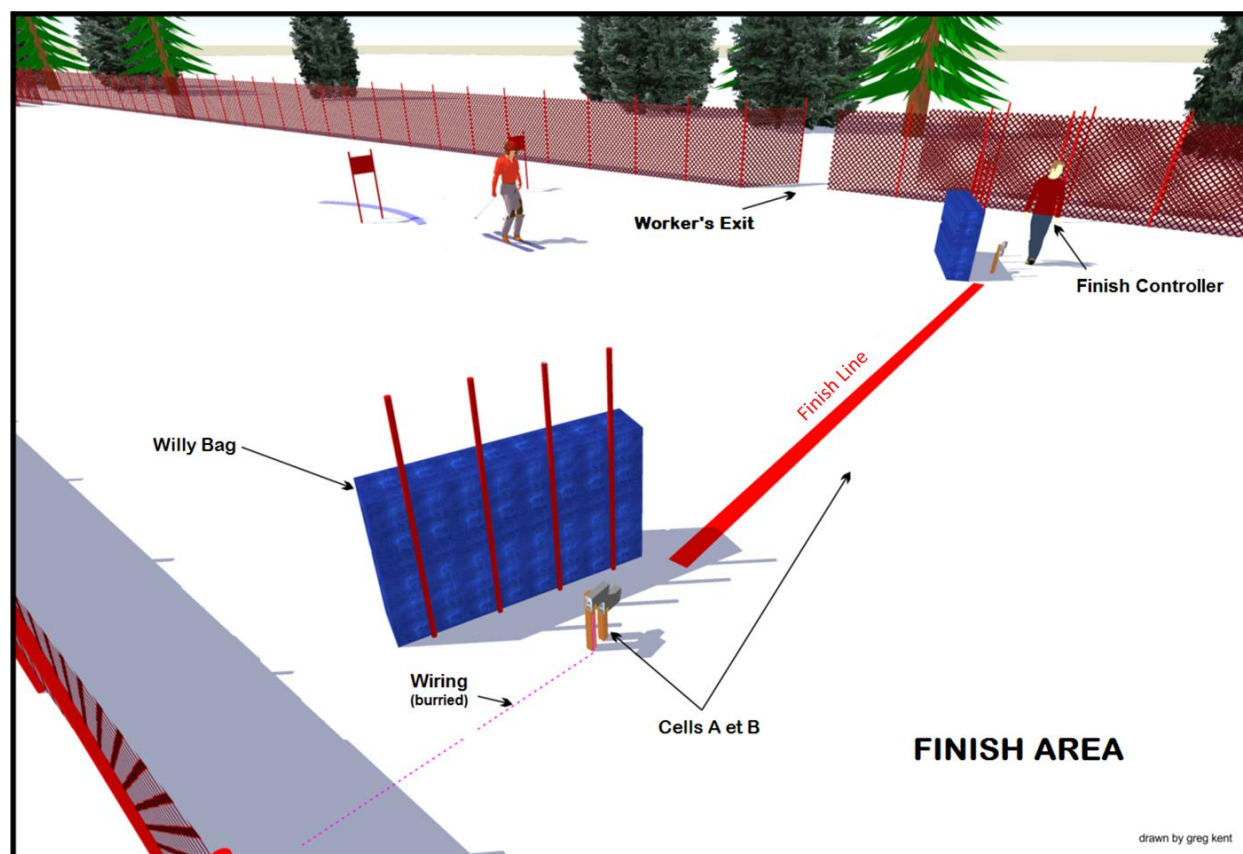
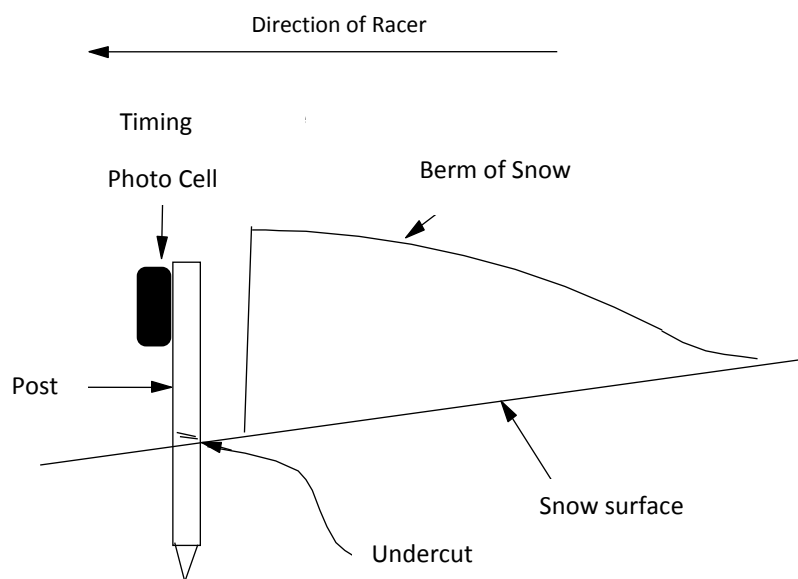


Figure 12 – Finish Timing Posts



4 RACE ORGANIZATION

4.1 PLANNING FOR A RACE

Holding a ski race requires work - the exact amount depends of course on the level of the race. But, the satisfaction gained from being part of a successful ski race will make the effort very worthwhile.

What factors must be considered in making the decision to hold a race?

- Do you have a race track available for the calibre of race you wish to organize?
- Will the weather and snow pack be suited for the race (as far as can be ascertained)?
- Do you have permission and cooperation from the ski resort management to hold the event?
- Do you have sufficient qualified personnel to organize, prepare and operate the race?
- Do you have sufficient equipment (poles, flags, timers, bibs, etc.)?

If all answers are affirmative, the next step is to appoint a Race Chairman of the Organizing Committee and start organizing the race.

4.2 ORGANIZING COMMITTEE

The number of people required to organize and run a race will depend on the level of the race event to be held. A major event such as a World Cup will require hundreds of volunteers, but a PSO race may be done with 40 to 50 volunteers.

Key officials' duties are summarized below. They will be covered in detail as the different aspects of a race organization are presented.

Race Chairman of the Organizing Committee:	Manages all non-technical committees or work groups of the organization until the end of the race.
Chief of Race:	Responsible for all safety and technical aspects of the race.
Chief of Administration: (Race Administrator)	Responsible for all records, the draw, registration of racers, bibs, paperwork and results production.
Chief of Course:	Supervises the on-hill arrangements such as the preparation and maintenance of the course, course setting, course marking, flagging, gates numbering, dismantling the course and course cleanup, etc. Works with the Course Setter.
Chief of Timing and Calculation:	Supervises all timing systems (electronic, manual), communications and calculations, plans and sets up all timing and communication systems, oversees timers, recorders, starters, calculators and spotters.
Chief of Gate Judges:	Organizes and supervises the Gate Judges.
Chief of Equipment:	Responsible to provide all the necessary equipment to prepare and operate a race.
Chief of Stewards:	Responsible for the control of spectators, recreational skiers and first-aid coverage.
Chief of Event Quality:	Responsible for coordinating the race with the Ski Area, arranging the awards and media promotion & relations.

4.3 PRE-RACE ORGANIZATION

4.3.1 RACE NOTICE

For all race levels, a race notice is necessary if competitors from outside the host club participate. This notice can be simple or very formal and detailed for a higher level race. Preparation of the Race Notice is the responsibility of the Chief of Administration (Race Administrator). It should be distributed at least 3 weeks in advance of the race event.

A number of PSO's post the race notice on their web site.

There is certain basic information to include in a Race Notice:

- a) Name, date and location of the event.
- b) Location and registration time.
- c) Number of competitors, specifying qualifications or restrictions on competitors' eligibility
- d) Pertinent race information related to:
 - i) Schedule of events
 - ii) Starting time

Special regulations

- e) Race entry cost
- f) Cost of lift tickets & complimentary or purchase tickets for Coaches
- g) Location and time of Team Captains meeting and the draw
- h) Registration procedure and deadline (24 to 48 hours prior to the first coaches meeting)
- i) Location of the race headquarters
- j) Names and telephone numbers of the key contact individuals

4.3.2 THE COACHES MEETING AND DRAW

The coaches meeting ~ also known as the **Team Captain's meeting** gives the visiting coaches an impression of the organizer's attitude toward the race, the planning and race organization. No matter how small or informal, the Coaches' meeting is a valuable tool in a well-organized race and is an inseparable part of the competition. The time and location is announced on the race notice. The agenda should be prepared in advance by the Chief of Race and confirmed by the Technical Delegate. Items covered at the meeting include: payment of race entry fees, issuing of lift tickets for the competitor's and coaches, details concerning the race, review of the rules, finalization of the Jury, selection of the course setters and the draw.

Grouping and the draw are procedures used to establish the competitor's starting order. The goal is to enable skiers of almost equal abilities to compete as near as possible under equal or similar weather and course conditions so a fair test of skills will occur.

The type of race will determine the method for grouping and drawing, however the basic principles remain the same. Competitors are grouped and then drawn within the group. For the race, competitors are arranged in order of current "seeding points" i.e. the competitor's National points or FIS points that are valid for that particular race. The first 30 or 15 are drawn, the reminder run in order of points. Those without points form another group that is drawn at the end.

There are different methods of completing the draw. The drawing methods vary at World Cup, FIS and PSO races, the simplest being by random computer draw.

4.3.3 BIB DISTRIBUTION

Bib distribution can take place following the draw. Bibs are organized into clubs or teams and given to the coaches upon payment of a bib deposit fee. At PSO level races bibs can be distributed the morning of the race. Start lists should also be available to the coaches so they can give the correct bib number to each of their athletes.

4.4 FUNCTIONS OF RACE OFFICIALS

In section 4.2, the various key Officials required to operate a race were identified. The number of Officials varies considerably with the calibre of the race.

With this premise in mind, let's now focus on the functions of race Officials, keeping in mind that many of these positions can be combined in a small race as long as all the responsibilities are covered.

4.4.1 CHIEF OF RACE – RACE CHAIRMAN

For a PSO race, the Chief of Race and Race Chairman are merged. Leadership skills of the Race Chairman include the ability to wisely choose the subcommittee Chiefs and get the best effort from each of them. The role of the Chairman is to manage all the committees (except the ROC) from their inception to the completion of the event.

The Chief of Race must possess good technical knowledge and be able to advise on all the technical operations of the race. Moreover, he/she must be a good organizer, a team leader and capable of obtaining the most from the organizing committee.

As a Chief of Race, he/she directs and controls the technical work of all the Officials and presides over meetings on all technical matters. He/she is responsible of the medical and crowd control facilities. In larger races, a Chief Steward will be responsible crowd control of the race but in smaller races this is a direct responsibility of the Chief of Race. In fact, the Chief of Race assumes responsibility for all the duties of any other Chief positions that are not appointed. He/she also are a member of the Jury and works closely with the Technical Delegate and other Jury members.

4.4.2 CHIEF OF EVENT QUALITY

With the assistance of the Chief of Ski Area Relations and Chief of Awards & Media Relations will ensure the following are covered:

1. Setting up race dates with ski area, communication regarding local race rules, and monitoring of racer activity in the day lodge or public areas throughout the race.
2. Arranging logistics of lift tickets, installation of banners and other promotional material.
3. Arrange public relations, location of PR areas, results to media, arranging the awards ceremony.

4.4.3 CHIEF OF COURSE

The Chief of Course must have good technical knowledge; know the race rules and race course requirement. He/she will be responsible of all the key factors that will directly affect the success of the race and the conditions under which the racers race.

He/she must be familiar with the snow conditions of the area and have sufficient experience and knowledge to be able to make the correct decisions in poor snow or weather conditions.

He/she is responsible for the preparation of the course and its maintenance throughout the race. It is imperative that the Chief of Course has adequate course crew for the above tasks. He/she is responsible for the course marking, including direction marking and marking pole positions as well as

providing the course setter with assistance and all the necessary equipment in order to be productive. This includes having a sufficient number of people available to make course setting go as quickly as possible. He/she must provide all the required equipment for numbering and flagging the gates.

He/she must also take care of the preparation of the start and finish areas.

The Chief of Course must make sure that the course crew is well prepared and have course crews available during any race holds.

4.4.4 CHIEF OF EQUIPMENT

In larger races, this is a designated Chief position but generally at lower level races the various other Chiefs do the duties. The list of equipment will serve as a guide for the requirements of the race. Items include: gates both flex and bamboo, gate flags, dye, gate numbers, stop watches, radios, fencing, poles, course protection equipment, rakes, shovels, fertilizer, drills, gate keys, wedges, scoreboard, stationary supplies, office equipment, gate judge equipment etc.

4.4.5 FORERUNNERS

The organizer is obliged to provide at least three forerunners.. A forerunner must wear a forerunner bib and should have the skiing ability to ski the course in a racing manner. , Forerunners must inspect the course. Before the race starts, they set the line and provide course condition information to the Officials. It is very important that forerunners are qualified and provide information on course conditions to the Jury. Forerunners must be a member of a National association (e.g ACA) or for FIS races sign a FIS Athletes Declaration.

4.4.6 TIMING AND STARTING PERSONNEL

The start and finish personnel work as a team to start the racers and to record the finish time of each racer. There are many variations concerning the equipment and the personnel available. Some are methods are illustrated below.

In all cases, the starter is responsible for giving the correct start to each racer. The assistant starter is responsible for arranging the racers in the correct starting order.

When the starter is informed that the timers are ready for the next racer, he alerts the racer, then gives him a count down.

Let us now consider the following timing and communication situations:

1- Electronic Timing

Electronic timing is mandatory for all carded races. In FIS races and select national non-FIS calendared championship races, it is mandatory to use two synchronised electronically isolated timing systems operating in the time of day. The timing systems requires three pairs of wires be in place from the start to the finish to carry System A and System B timing signals and communications between the start and finish areas, the start wand, finish beam with reflectors and a timing unit to receive and process the start and finish signals.

Many models of electronic timers are available.

The principles of timing: The starter gives the start signal. When the racer moves the start wand, the circuit is closed and the start signal is sent to the timing machine. When the racer breaks the light beam at the finish the circuit is again closed and the finish signal is sent to the machine which calculates the elapsed time of the racer and prints it out.

Timing machines have become very sophisticated over the past few years but are basically a small computer, many of which require no calculations on the part of the operator. However, keeping track of all the racers on course, DNS and DNF racers, and ensuring that the correct start and finish times are recorded for each racer requires skill and experience on the part of the operator.

Every event has the opportunity for the electronic equipment to malfunction at some time or another, probably instantaneously. Thus the electronics may miss the time for one of more racers. To compensate for this, and to avoid having racers re-run the course, backup manual timing always is provided.

Hand timing, the method used detailed below. If an electronic time is missed, then hand timing times are used to calculate what is called a calculated net manual time or EET for the racer. Therefore, it is very important that the manual timers are checked to ensure that a manual time exists for a racer if an electronic time has been missed.

It tends to be both embarrassing and complicated if it is discovered after the fact that the manual timers also missed the time!

2- Hand Timing or Time of Day Timing

Hand timing is mandatory in all carded races and is used primarily as backup manual timing for the electric timing systems.

The watches required for hand timing are called “splits”. They are different from single event stop watches in that when the split button is pressed after the watch is started, the display is frozen to allow the display to be read and recorded. At the same time, the watch is still running internally. When the split button is clicked again it shows the total time that has elapsed since the watch was first started.

In this method, the manual start timer and the manual finish timer start their watches simultaneously approximately 30 minutes before the race. The start timer presses the split button each time a racer starts and the reading is recorded. When the racer crosses the finishing line, the finish timer presses the split button and records the reading. The difference between the start and finish reading is the time the racer took to complete the course.

In hand timing, times are measured only to the 100th second. 1000th of a second, even though displayed on the watches are not used.

Here is a calculation example:	Start Time:	01:01:48.01
	Finish Time:	<u>01:01:01.69</u>
	Time:	46.32

Some Key Points to be noted are:

Two watches should be used for both the start and finish. Thus if one watch becomes non-functional then the other watch is used. All four watches are synchronized prior to the start of the race. Do this by simultaneously pressing all four start buttons. Allow the watches to run for a short time, then press the split buttons on all four and check to see that the times are acceptably close to each other. If not, then the process is repeated until the four watches are synchronized.

The pair of watches with the closest time, label as “A” and the second two of closest time label as “B”. One “A” and one “B” watch go at the start. The second set of “A” and “B” watches will go to the finish. “A” watch OR “B” watch at the start and finish must be used and recorded at same time.

The watches should be resynchronized before the second run. It is also important to check the readings on the two watches at start and finish periodically to ensure that they are staying consistent with each other.

Timers must also strive to be as consistent as possible as to when the split button is pressed for each racer as to both the start and finish of each racer so that the same judgment is used each time as to point taken for start or finish.

The above personnel and functions are under the supervision of the Chief of Timing and Calculations. This person is responsible for the coordination of the start and finish personnel, including timing, calculations and the scoreboard.

4.4.7 CHIEF OF ADMINISTRATION (RACE ADMINISTRATOR)

Racing involves considerable paperwork, most of which is the responsibility of the Chief of Administration, also known as the Race Administrator. This person is responsible for sending the race notice, taking minutes at all race committee meetings, Jury meetings and Team Captain's meetings, handling all correspondence, receiving all entries and race entry fees, preparing the draw cards, preparing start lists, distributing and collecting bibs as well as giving out information. He/she is also responsible for the preparation and the distribution of the results.

This is a very demanding job that requires excellent organizational and administrative skills as well as good knowledge of the many different aspects of race organization.

The Chief of Administration's duties and responsibilities are covered in the Level 2 course.

4.4.8 CHIEF OF GATE JUDGES AND GATE JUDGES

The Chief of Gate Judges is responsible for recruiting, training and organizing sufficient Gate Judges for the race. He/she should have a thorough knowledge of the competition rules and be prepared to undertake any training of Gate Judges prior to the race and issue them with a clear and concise set of instructions of their duties. He/she must place each Gate Judge in a strategic position to perform their duties and designate the gates they are responsible for.

Each Gate Judge must be easily identifiable. They must have with them all the required material to perform their duties: clipboard with cover, Gate Judge cards, pencils and a start lists. Each Gate Judge is issued with a GJ card for each race and instructed in the proper method of filling in the card.

During the race, the Chief of the Gate Judges must continually work with the Gate Judges to ensure that the team members perform their duties effectively. He/she should also make sure of their comfort.

The Gate Judge is the most important official during the race. They should have a thorough knowledge of the competition rules.

The gate judge is required to follow instructions from the Jury.

A Gate Judge is responsible for judging the passage of each competitor through the gates and deciding whether the passage is correct. The decision handed down by the gate judge must be clear and unbiased and the gate judge must declare a fault only when he/she is convinced that a fault has been committed.

The gate judge can consult the adjacent gate judge in order to confirm his/her notes. He can even demand via a member of the Jury that the race be briefly interrupted, so that he may check the tracks on the course.

Correct passage of the gates:

A gate has been passed correctly when both the competitor's ski tips and both feet have passed across the gate line. If a competitor loses a ski, without committing a fault then the tip of the remaining ski and both feet must have passed the gate line.

This rule is also valid when a competitor has to climb back up to a gate.

The gate lines in Down Hill, Giant Slalom and Super G, where a gate consists of two pairs of poles holding gate flags between them, is the imaginary shortest line between the two inner poles at snow level.

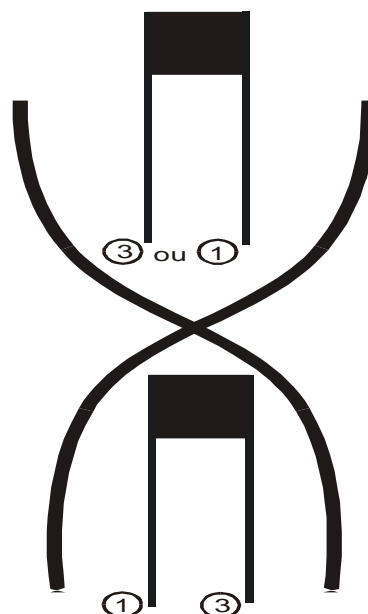
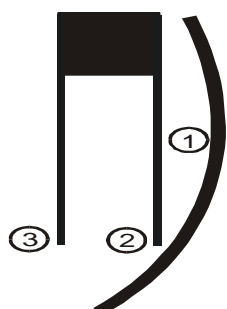
The gate line in Slalom is the imaginary line between the turning pole and outside pole.

The gate line in single pole Slalom is the imaginary shortest line from turning pole to the turning pole immediately above.


The following drawings illustrate different situations where passage is correct:

DH, GS, SG GATES

- 1- TURNING POLE
- 2- INSIDE POLE
- 3- OUTSIDE POLE

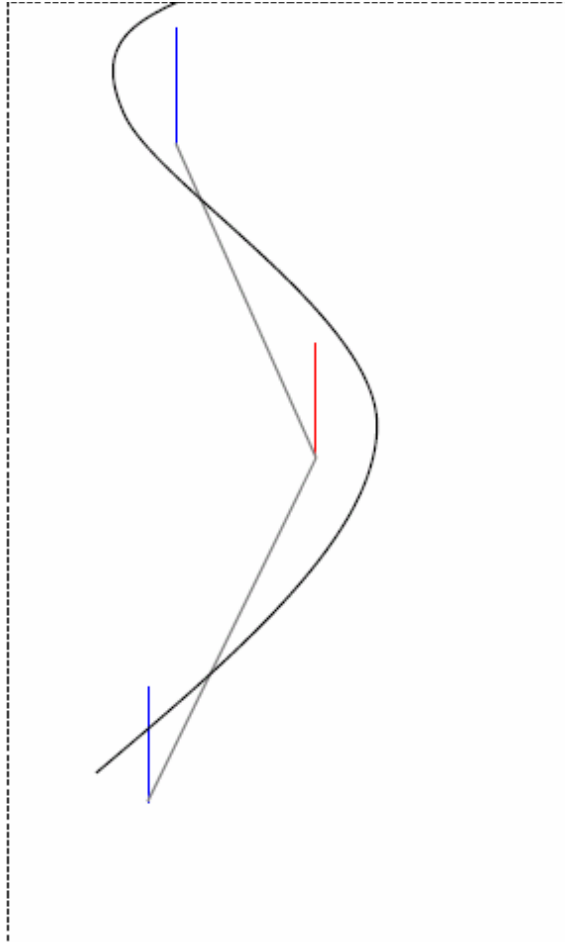


SL GATES

All gates with both (3)  numbered on the outside pole.



turning and outside poles must be



SLALOM GATE - SINGLE POLE

1 – TURNING POLE

WHERE THERE IS NO OUTSIDE POLE, BOTH FEET AND SKI TIPS MUST HAVE PASSED THE TURNING POLE ON THE SAME SIDE FOLLOWING THE NATURAL COURSE OF THE SLALOM.

THE NATURAL RACE LINE IS AN IMAGINARY LINE FROM TURNING POLE TO THE TURNING POLE ABOVE, WHICH THE RACER MUST CROSS.

On SL and GS course, both feet and ski tips must have passed the turning pole on the same side, following the natural course of the slalom.

The natural line is the imaginary line from turning pole to turning pole which the racer has to cross.

If the racer has not correctly passed the natural race line, then he has to climb back up and pass around the missed turning pole. When stepping up the racer must climb up to the level of the turning pole, horizontally to the fall line.

In the event that a competitor removes a pole from its vertical position before both the competitor's ski tips and both feet have passed the gate line, the ski tips and feet or if on one ski, the tip of the remaining ski and both feet must pass the original gate line.

Gates with no outside pole will be numbered on the turning gate

All turning poles locations are marked with dye (the same color dye at each gate for each race) and should always serve as a reference point.

Straddle of a gate is a disqualification.

As long as **both feet** and **both ski tips** cross the imaginary line between the pole locations or in single pole the imaginary line from turning pole to turning pole, the racer's passage is correct even if he/she:

- a) Knocks down one or both of the gates;
- b) Slides through the gate on some part of their body other than their feet;
- c) Temporarily looses one or both skis;
- d) Hikes back up to a gate and crosses the line between the gates [slalom only];
- e) Passes through the gates out of their numerical order.

Examples of legal and incorrect passages with outside poles are illustrated on the following pages:

NOTE: Climbing is permitted in slalom ONLY. An athlete in a GS, SG, DH who comes to a complete stop may not continue.

No stepping back

- 614.2.3 Interdiction to Continue after a competitor stops If a competitor comes to a complete stop (e.g. after a fall), he must no longer continue through previous or further gates. This interdiction is valid in all events with a fixed start interval (DH, SG, GS). Only exception is for SL (art. 661.4.1), as long as the competitor does not interfere with the run of the following competitor or has been passed by a competitor.
- 628.8 [*reasons for disqualification*] continues to race after committing a gate fault or after comes to a complete stop (art. 614.2.2, 614.2.3).
- 661.4.1 A gate has been passed correctly when both the competitor's ski tips and both feet have crossed the gate line. If a competitor loses a ski, without committing a fault, e.g. not by straddling a pole, then the tip of the remaining ski and both feet must have crossed the gate line. This rule also applies when a competitor has to climb back up to a gate. (art 614.2.3).
- 804.3 Where there is no outside pole, both feet and ski tips must have passed the turning pole on the same side, following the normal race line of the slalom crossing the imaginary line from turning pole to turning pole. If a competitor loses a ski, without committing a fault, e.g. not by straddling a pole, then the tip of the remaining ski and both feet must meet both requirements. If the racer has not correctly crossed the imaginary line from turning pole to turning pole and does not follow the normal race line, then he has to climb back up and pass around the missed turning pole. Where there is an outside pole (first and last gate, delayed gate, and combinations (hairpin, vertical) art. 661.4.1. is valid.
- 904.3 Where there is no outside gate, both feet and ski tips must have passed the turning pole of the turning gate on the same side, following the normal race line of the Giant Slalom crossing the imaginary line from turning pole to turning pole. If a competitor loses a ski, without committing a fault, e.g. not by straddling a pole, then the tip of the remaining ski and both feet must meet both requirements. Where there is an outside gate (first and last gate, delayed gate) art. 661.4.1. is valid

Figure 13 – Example of legal or correct passages

Slalom

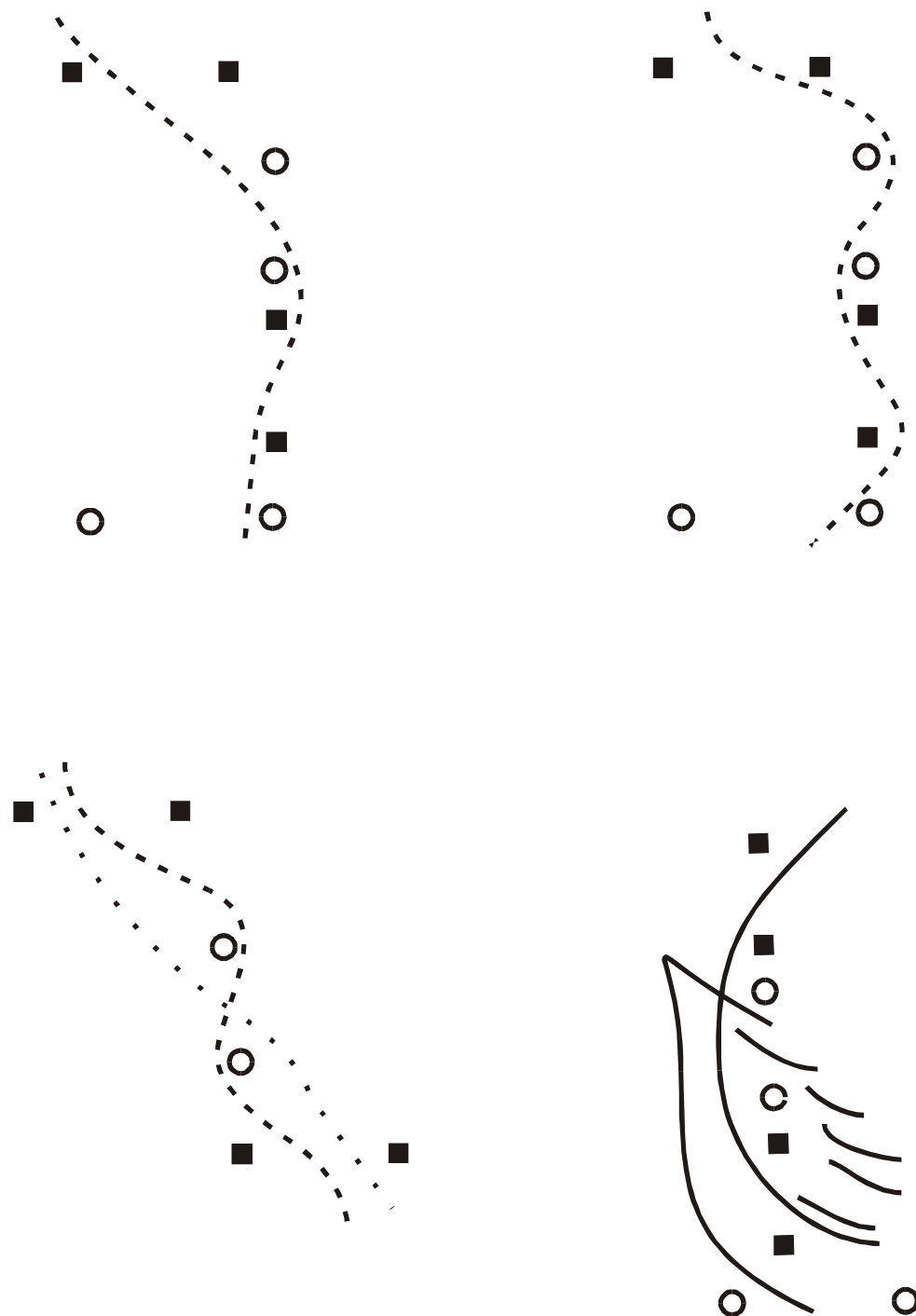
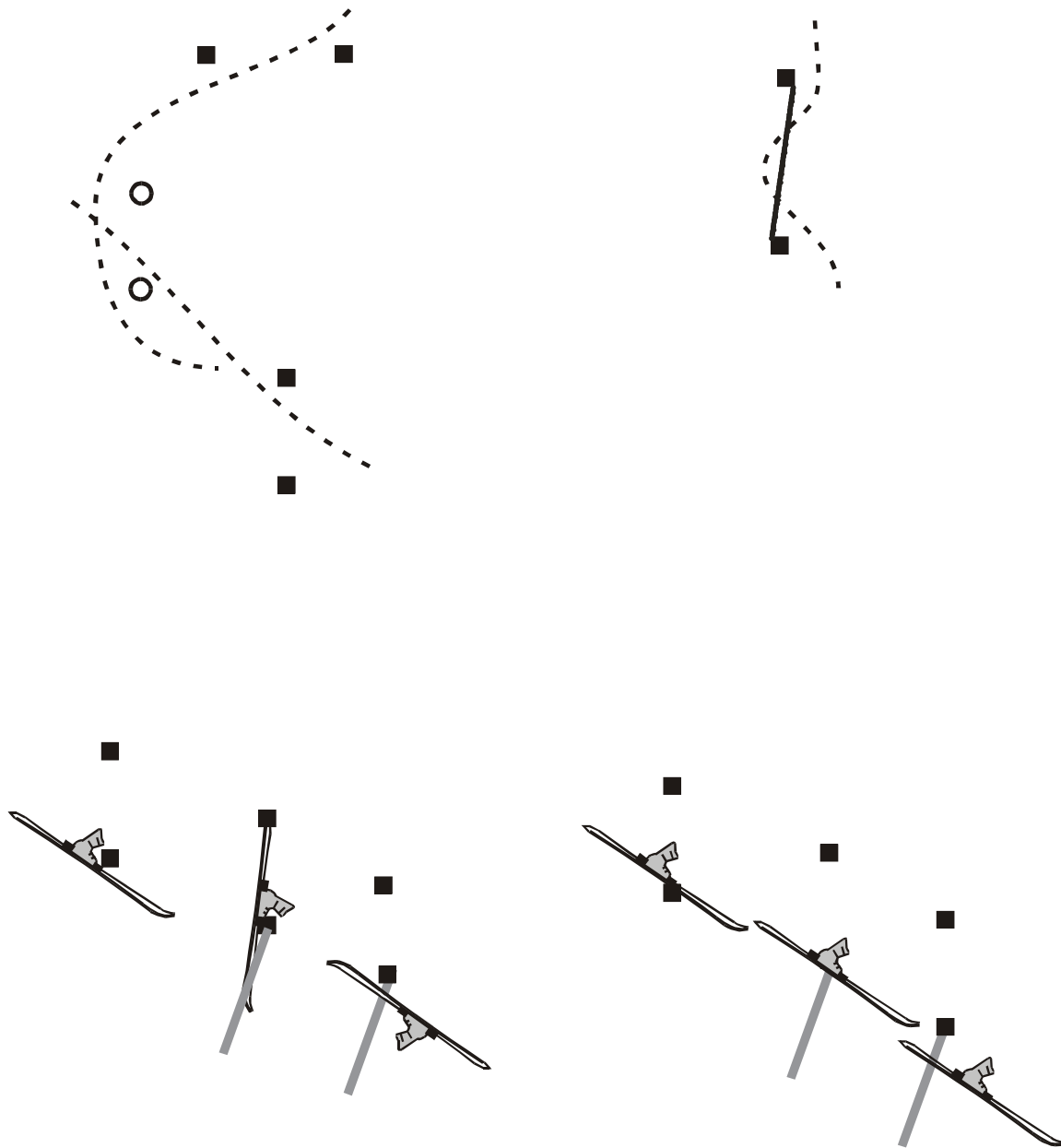
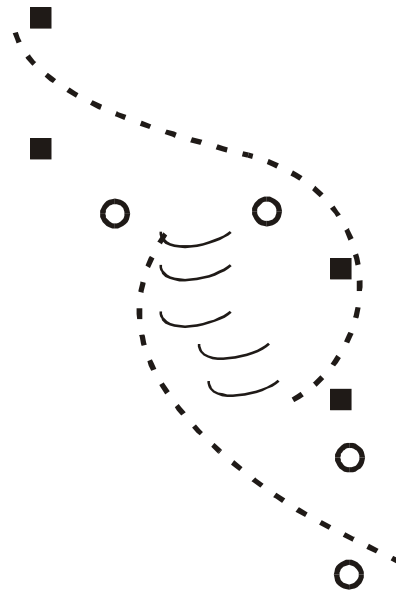
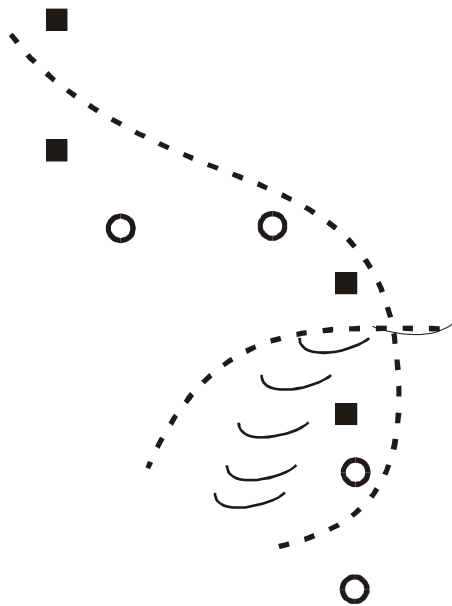
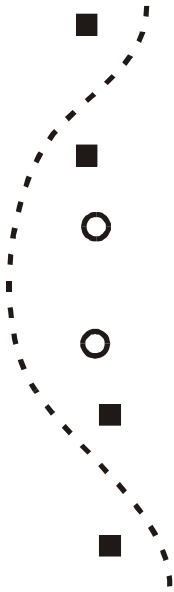


Figure 14. Examples of illegal and incorrect passages





A racer having made an error or fall is permitted to ask the gate judge if a fault was committed and the gate judge if asked must inform a competitor if he has committed a fault that would lead to disqualification.

The competitor is fully responsible for his/her action and in this respect cannot hold the gate judge responsible

Every Gate Judge must receive a Gate Judge card along with weatherproof covering where necessary, for each run that will show:

- a) Name of the Gate Judge.
- b) Number(s) of the gate(s) he/she is responsible
- c) Designation of the run (1st or 2nd) men or women's race.
- d) The date of the event.

On arrival at their course position the Gate Judge should draw the gates he/she has to watch while distinctively identifying his/her position, the gate(s), number(s) and its/their color(s).

If a competitor does not pass a gate (or a gate marker) correctly, according to art. 661.4 the Gate Judge must immediately and clearly mark on the gate judge card

- a) The (bib) start number of the competitor
- b) The gate number where the fault was made
- c) A drawing of the fault committed is essential

The Gate Judge must also observe that the competitor accepts no outside help (e.g. in the case of a fall). A fault of this nature must be noted on the Gate Judge card.

Any outside assistance may result in disqualification of the competitor.




The National Gate Judge card is shown.

When the Gate Judge Cards are reviewed by the Referee and members of the Jury, it must be absolutely clear whether the competitor correctly passed through the gate or if he/she has been rendered liable to disqualification. The Gate Judge may not discuss the disqualification with anyone other than the Chief of Gates and members of the Jury. Gate Judges who have disqualified a competitor must be available to explain the circumstances to the appropriate race officials at the end of the race.

Figure 15. National Gate Judge Card

OUTSIDE:

INSTRUCTIONS FOR GATE JUDGES

1. Upon arriving at your assigned gate(s) remove your skis and place them on the ground parallel to course, outside fencing and away from any spill zone.
2. Stand where you can best see all your gates while maintaining a position of maximum security. You may be assisted in this task by your Section Chief, Chief of Gate Judges or the Jury.
3. Fill out the front of the card and then immediately draw a picture of your assigned gates. Draw the  symbol to indicate your position. Mark all blue gates with a diamond symbol  and all red gates with a circle  symbol.
4. Mark only DSQ's/faults and note the racer's number in the responding box.
- a. Draw a detailed diagram of the DSQ's/fault committed on the pre-drawn gate picture.
- b. Be prepared to explain all faults.
- c. The adjacent Gate Judge can be consulted in order to confirm your notes otherwise do not discuss the fault except with the Chief of Gate Judges or Jury.
- d. If you are a witness to a fault be prepared to attend a jury meeting and do not leave the finish area until dismissed by the Chief Gate Judges. This rule applies even if the fault occurs at a gate that you are not assigned (ie witness).
- e. Gate Judge decisions must be clear and unbiased. Declare a fault only when convinced that a fault has been committed.
5. Record on the card the circumstances of any interference with a racer's run.
6. A competitor in case of an error or a fall can ask if a fault was committed, the Gate Judge if asked must inform a competitor if he has committed a fault that would lead to a DSQ.
7. If you are capable, replace any gate poles to the exact spot or dye mark in the snow, replace gate flags and maintain course conditions until assistance from the Race Crew arrives.
8. Remain in place until your card is picked up by your Section Chief or Chief of Gate Judges.

*****REMEMBER CORRECT PASSAGE*****

IS WHEN BOTH SKI TIPS AND BOTH FEET HAVE PASSED ACROSS THE GATE LINE. IF ON ONE SKI, THE TIP OF THE ONE SKI AND BOTH FEET MUST HAVE PASSED ACROSS THE GATE LINE.

DSQ's/Faults:

Yes: ☐

No: ☐



ALPINE CANADA

Gate Judges Card

Race: _____

Date: _____

Men ☐ Women ☐ Run# _____

DH ☐ SG ☐ GS ☐ SL ☐

Gate No(s): _____

Name: _____

Signature: _____




INSIDE

Bib Number	Gate Number

Bib Number	Gate Number

Notes

Diagram

 - Blue  - Red  - Your Location

Number of Gate Judges

The organizer is responsible for having a sufficient number of competent gate judges available who are able to fulfill their duties.

The organizer must inform the Jury of the number of gate judges available for the training and particularly for the race. At Olympic/Paralympic Winter Games, FIS World Ski Championships and FIS/IPC World Cup competitions, the number of gate judges is determined by the Jury.

The work of the Gate Judge begins when a racer approaches the gates he/she watches and ends when the racer makes his way towards another judge's territory after passing through the last gate under his/her responsibility. In Downhill and in Super G, the Gate Judge watches the course area visible above and below him.

Location and Support of the Gate Judge

The gate judge must be so placed that he/she can properly observe all terrain or the gates and course sections which he/she is to oversee, near enough to be able to take prompt action, but distant enough not to hinder the competitor. He/she must be located in a safe area,

Organizers are obliged to outfit the gate judges so that they are readily identifiable. The method of identification or clothing should be such a color as not to be confused with a gate flag.

The gate judge should be in their location well before the start of the run.

Any equipment necessary to permit the gate judge to perform his/her assigned duties should be provided

Supplemental Duties of the Gate Judge

The gate judge may be asked to perform other duties after he/she performs the required gate judge functions. Other duties include:

- a) Replacement of gate poles, torn or missing banners.
- b) He/she should assist in keeping the course clear and remove any markings made on the course by competitors or third parties.
- c) A competitor who is obstructed during his run must stop immediately and report this to the nearest gate judge. The gate judge must enter the circumstances of the incident on his gate judge card and have this available for the Jury at the end of the 1st or 2nd run.

If someone or something is on the course which should not be there, such as a spectator, an Official, a broken pole, goggles, a piece of equipment, another racer, etc; it constitutes an interference only if it causes the racer to slow down, to change direction or to miss a gate.

Gate Judges

Are responsible for judging the passage of each competitor through the gate/s they are assigned and deciding whether the passage is correct.

The decision handed must be clear and unbiased.

A fault is declared only when he/she is convinced that a fault has been committed.

Correct Passage

When the competitors ski tips and both feet have crossed the gate line, if on one ski, the tip of the remaining ski and both feet must have crossed the gate line.

In Slalom and GS, where there is no outside pole both feet and ski tips must have crossed the turning pole on the same side following the normal race line to the next turning gate.

Doubt

A competitor, in the case of an error or a fall is permitted to ask the gate judge if a fault is committed and the gate judge asked must inform a competitor if he has committed a fault that would lead to disqualification.

The competitor himself is fully responsible for his action and in this respect he cannot hold the gate judge responsible.

RE-RUN

If a racer is interfered with on course, he/she must stop at the site of interference if they want a re-run.

Gate Judge notes:

- Bib number
- Gate number
- The circumstances
- The witnesses

The competitor proceeds off course to the Finish Referee to ask for a re-run

If the racer does not stop and continues to ski the course, he/she will not be eligible for a re-run.

GATE JUDGE CARD

Fill in before the race:

- Your name
- The assigned gate number/s
- The date, run and gender of the race
- Draw a few sketches of the assigned gates

Fill out if there's a fault:

- Bib number of the competitor
- Gate number(s) where the fault was made
- A drawing of the fault committed
- If the competitor accepts outside help, a fault of this nature must likewise be entered on the gate card.

Comments

- In serious doubt, the benefit of the doubt goes to the competitor.
- If you have any questions, you address them to the Chief of Gate Judges or to a member of the Jury.
- Do not let the public influence you.
- Watch what is happening before and after your gates: you could be an important witness (write down what you see.)
- The adjacent gate judge can be consulted in order to confirm your notes.
- Wait for the Chief of Gate Judges to collect your GJ card before leaving your position.
- If you have a disqualification, you must be available for the Jury and until the end of the protests if there are any.

Other Gate Judge Related Duties

- Straighten up or replace the poles
- Control the spectators
- Watch the course
- Clear any hazards off the course

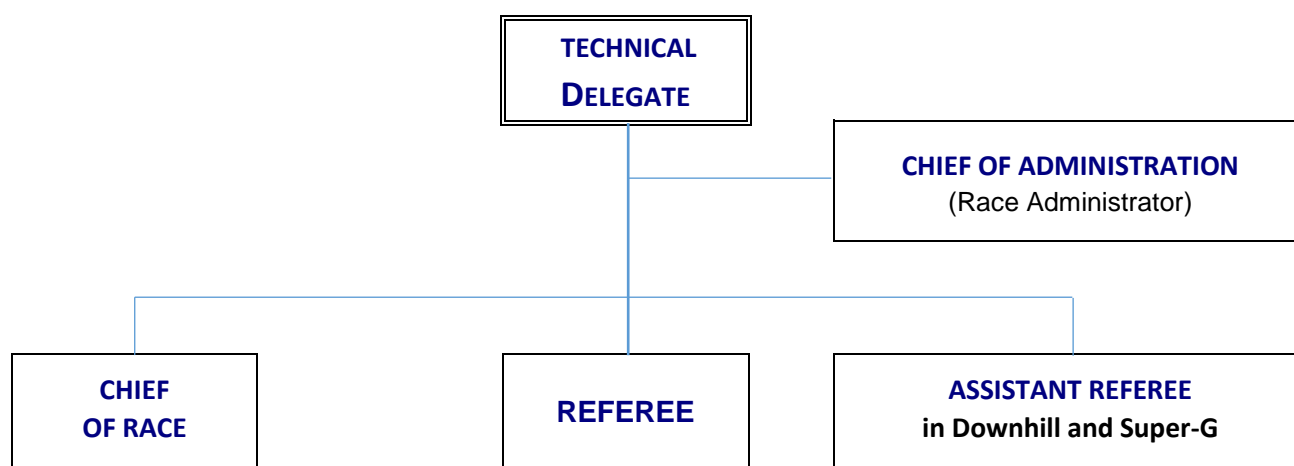
4.4.9 THE JURY

At every race, a Jury is appointed and assumes the following responsibilities:

- Application and implementation of the rules
- Conduct the draw
- Inspect the course
- Supervise the start and the finish
- Rule on all provisional re-runs and protests
- Interrupt, postpone or cancel the race;
- Approve the timing and calculation methods.

The composition of a jury is illustrated on the following page, along with the specific title of each member.

Figure 16 – Members of the Jury



	Olympic/Paralympic World Championships	Nor-Am	FIS/IPC International	National	PSO
TECHNICAL DELEGATE	FIS	FIS	FIS	ACA National	PSO Division
CHIEF OF RACE	HOST Level 3	HOST Level 3	HOST Level 3	HOST Level 2	HOST Level 2
REFEREE	FIS	BY ACA	BY TD	BY TD	BY TD
ASSISTANT REFEREE	FIS	ONLY IN DOWNHILL AND SUPER-G AND APPOINTED BY TD			

The Technical Delegate is Chairman of the Jury appointed to the race. He/she has the full authority on safety matters. He/she works closely with the other Jury members and the race committee. He/she is there to assist and advise the race organization

Qualifications for Jury Members

a) Downhill and Super G Races

- | | |
|------------------------|---|
| 1. Chief of Race: | FIS - Level 3 – Official certification
PSO race – Level 2 certification |
| 2. Referee: | Minimum of CSCF Development Level (Trained) coach certification, and any of:
a) Level II Officials certification,
b) CSCF Rules and Regulations Module,
c) PSO, National or FIS TD with DH/SG certification. |
| 3. Assistant Referee: | Same as for Referee except CSCF Development Level coach certification is not mandatory |
| 4. Technical Delegate: | FIS -FIS Technical Delegate
PSO – Technical Delegate – speed certification & minimum Level 3 |

b) Technical Events

- | | |
|------------------------|---|
| 1. Technical Delegate: | FIS – FIS Technical Delegate
PSO – Minimum of Level 3 Divisional Technical Delegate
Regional races – Level 2 |
| 2. Chief of Race | FIS – Level 3 Official
PSO – Level 2 Official |
| 3. Referee: | Minimum of CSCF Development Level (Trained) coach certification, and any of:
a) Level II Officials certification,
b) CSCF Rules and Regulations Module,
c) PSO, National or FIS TD with DH/SG certification. |
| 4. Assistant Referee: | Same as for Referee except CSCF Development Level coach certification is not mandatory |

Note: the above are minimum qualifications for race Jury positions.

START & FINISH REFEREES

In addition to the above, there are two Jury advisors - Start Referee and Finish Referee. They are appointed by the Race Committee. They are responsible for the start and finish areas respectively. They advise the Jury concerning competitor disqualifications and may approve provisional starts/re-runs.

c) **REGIONAL ENTRY LEVEL RACES &/or NANCY GREENE SKI LEAGUE**

All races, including weekly races must have a Level 2 and three Level 1 Officials in charge.

The use of Technical Advisors (Level 2 & > Officials with practical race experience to assist the Entry Level Race Organizing Committee) is recommended if the EL ROC is not race experienced.

The host Club executive are to assign an experienced club Official as the Technical Advisor to work with the ROC and assist with planning and completion of ENL race event.

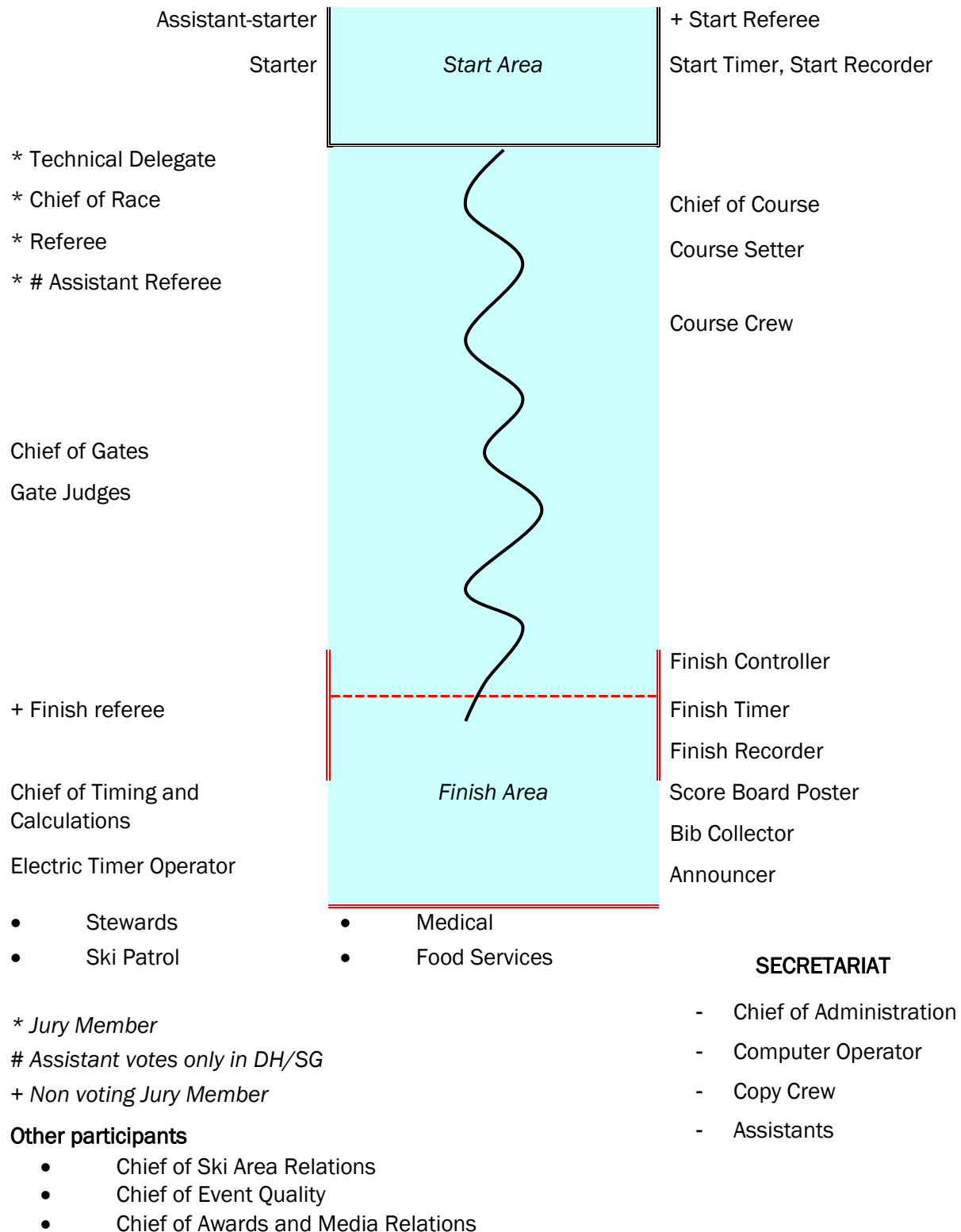
4.5 SYNOPSIS OF A RACE

Now that all of the necessary people have been identified to run a race, let us take a look at a diagram of the activities that go on before, during and after a race and some of the Officials involved at each stage.

<u>Off the Hill Activities</u>	<u>On the Hill Activities</u>
Before the Race	
Planning	Course Preparations
Publicity	Check Communications
Race Notice	
Entries	Set First Course
	Final Hill Preparation
	Timing Installation
Team Captains Meeting	
Information Distribution	
Jury Selection	Course Inspection
Draw	Jury Meeting
Bib Distribution	
Preparation of 1st Run Start Lists	
During the Race	
	Start of Race
	Ski Patrol
	Stewards
Start List 2nd Run	Gate Judges
	Timing Personnel
	Course Crew
Results	Post / Announce DSQ's
	Jury Meeting
Tear Down/Clean Up	
Awards preparation	
Awards ceremony	

4.6 RACE PERSONNEL

The following diagram shows the location of race personnel according to responsibilities.



4.7 CHECK LIST FOR RACE ORGANIZERS

The following is a simplified check list for race organizers.

1. Early Fall

- ☐ a) Contact ski area management and obtain approval for the event.
- ☐ b) Check rules to see that terrain selected conforms to the rules for the events.
- ☐ c) Obtain approval for the event at the Zone meeting for inclusion in the PSO's calendar.
- ☐ d) Appoint a Race Chairman and Chief of Administration (Race Administrator).
- ☐ e) Establish and maintain regular contact with the ski area.

2. Four Weeks Prior to the Race or Earlier

- ☐ a) Make arrangements with ski area re: course preparation, lift operation, ticketing, course equipment, communications.
- ☐ b) Plan and acquire all needed equipment and spares and all supplies.
- ☐ c) Appoint and confirm all major Officials qualified for the level of race.
- ☐ d) Install and **test** all communications and timing wiring.
- ☐ e) Issue race notice.
- ☐ f) Contact Technical Delegate appointed to your race re: accommodation, arrival plans etc.
- ☐ g) Check on course preparation and grooming.

3. Two Weeks Prior to the Race

- ☐ a) Check with all committee chairman and Chiefs to ensure that they have enough personnel.
- ☐ b) Check with Chief of Equipment on progress of equipment.
- ☐ c) Order prizes.
- ☐ d) Inform TD of the progress of preparations and impending problems.
- ☐ e) Check safety provisions as applicable.
- ☐ f) Thoroughly test all timing and communications equipment on the hill.
- ☐ g) Check course preparations.

4. One Week Before Race

- ☐ a) Re-check all arrangements; inspect trail preparation personally.
- ☐ b) Bring equipment to ski area and race site if possible.
- ☐ c) Check with ski area.
- ☐ d) Contact all major Officials for progress report.
- ☐ e) Contact TD with status report.
- ☐ f) Insist that the course be packed, rolled, graded etc. during the week before the race.
- ☐ g) Make arrangements for chemical course preparation if required during the race event.
- ☐ h) Prepare for seeding meeting and draw.
- ☐ i) Arrange for preparation and installation of start and finish areas.
- ☐ j) Arrange for dignitary to present awards.
- ☐ k) Prepare race rules.
- ☐ l) Firm up schedule of events and confirm with Officials and ski area.

5. The Day Prior to the Race

- ☐ a) Confirm with Chief of Administration (Race Administrator) that all is ready.
- ☐ b) Check communications and timing system again.
- ☐ c) Do final grooming and set first course(s).
- ☐ d) Do final preparation of start and finish areas.
- ☐ e) Do final preparations for coaches meeting and draw.
- ☐ f) Confirm lift operation with ski area according to schedule.

6. Evening Before Race

- ☐ a) Coaches meeting, followed by draw.
- ☐ b) Jury meeting.
- ☐ c) ROC meeting.
- ☐ d) Make adjustments developing from these meetings.
- ☐ e) Publish race schedule, start lists, etc.

7. Race Day

- ☐ a) Arrive early!
- ☐ b) Final installation of timing and communications system two hours prior to race start.
- ☐ c) Jury inspection.
- ☐ d) Final course preparation as needed - dying, numbering, flagging.
- ☐ e) All Officials in place and ready in plenty of time prior to the start.
- ☐ f) Fore-runners go prior to start and report to Jury.
- ☐ g) Start on time.
- ☐ h) Remember to keep all racers, coaches and Officials informed of current events and any changes.
- ☐ i) Confirm quiet place for jury meeting.
- ☐ j) Make certain Chief of Gate Judges keeps Gate Judges informed for potential jury meeting.
- ☐ k) Process results as quickly as possible.
- ☐ l) Distribute unofficial results as soon as they are available.
- ☐ m) Ensure quiet, secure area for results production.
- ☐ n) Ensure course clean-up is satisfactory.

8. Key Elements on Race Day

- Course maintenance is particularly vital and should start before trouble spots develop and should continue until the last racer has finished.
- Be certain to provide sufficient equipment on the course: Poles, flags, rakes, bars, shovels, tiger torches and drills.
- Provide independent communications for Jury and Chief officials.
- Avoid interfering with timekeeping team and those working on results.

Thank everyone - All volunteers, Officials and area management.

5 POINTS TO PONDER

Competitors in Skiing are ranked according to their point standings in each of the disciplines i.e. Downhill (DH), Super Giant Slalom (Super G), Super Combined (SC),

Slalom (SL), Giant Slalom (GS) and Kinder Kombi (KK) Points and their calculations will be covered in the Level 2 course.

For parents of Kinder aged competitors – U-14 and U-16, the following “ski race primer” will give you a broad idea about “points” until you take the Level 2 course.

A SKI RACING PRIMER

Nothing is more confusing to newcomers to ski racing than **“POINTS”**....

In part this is due to the fact that the simple expression “points” can refer to RACERS CURRENT POINTS VALUE in each discipline (slalom, giant slalom, kinder kombi, super G, downhill and alpine combined) as shown on the NATIONAL POINTS LIST **or** we could be referring to RACE POINTS **or** to PENALTY POINTS. POINTS will be used here to refer to the points a racer has in each discipline and we will lead the reader through the nuances of points, their use and the various expressions using or referring to points.

Without a thorough understanding of POINTS, race entry forms cannot be completed, the start lists produced and race results cannot be made. Expressions like **“chasing points”**, **“points fixing”**, **“no result”**, **“giving away points”** and **“good or bad penalty”** cannot be understood. It is especially important that ski Officials understand points. That is why POINTS figure prominently in Level II and higher officials courses.

What follows is a basic primer on POINTS. It is intended for both those who need to know (coaches and race officials) as well as for those who want to know (parents and new racers).

POINTS : Who needs them? Most sports have devised methods of turning athlete’s performance into numbers. The numbers tell us the times taken to walk, run or swim specified distances, heights cleared and distances the javelin, shot-put or discus has been thrown. The golfer’s handicap and the ball player’s batting average are also examples of evaluation of performance and can be compared on a one to one basis. Points in skiing numerically compare the ability of one racer to another by converting the times taken to complete the race to a numerical value then adjusting that value to reflect the “quality” of the race.

MEET JOHN AND JUDY MOGULL

Our discussion begins with the twins John and Judy MOGULL (born Dec. 1 1999). John and Judy are leaving the Nancy Greene Ski League and entering the U-14 program.

All competitors must have a **COMPETITOR’S CARD**; therefore the first step in becoming a U-14 racer is to apply for this card. It is required for insurance purposes, for tracking of every competitor on the **NATIONAL POINTS LIST** and for entry into any sanctioned race. Applications are usually made for each athlete by the Club registrar. Once the application has been processed, John and Judy’s names will appear on the NATIONAL POINTS LIST but, as new racers, they will have no points values shown against their name. The term **no points** is commonly used to refer to racers such as John and Judy. It means that they have 999 points or they have no earned points at all on the National Points List.

For the rest of their career, John and Judy will be trying to REDUCE or LOWER the number of points they have in each discipline in which they participate. What follows is how they do it!

ENTERING A RACE

John and Judy's coach enters them along with the other U-14s in their first race, a slalom. The race entry is usually faxed or e-mailed to the Chief of Admin (Race Administrator) for the event at least a week in advance of the race. John and Judy are eligible because they are **CARDED** racers (i.e. have a registered competitors card) and appear on the National Points List.

The Chief of Administration puts all the entries into a computer and prints both boys and girls list of competitors in order of points - low points through to all those with 999 or no points value. Remember the **lower** the points value, the **better** the racer. Since this is their first race, John and Judy are in the last group of those with no points - 999ers.

THE COACHES (TEAM CAPTAINS) MEETING

The Coaches or Team Captains meeting is held the evening before the race. This meeting is also attended by the Race Organizing Committee (ROC) for the event and the

TECHNICAL DELEGATE (TD) appointed to the race.

Many matters are dealt with at this meeting but, because this is about POINTS, focus is on the draw.

THE DRAW

THE DRAW is the procedure used to create the start lists for the first run of the boys and girls races. It begins with a careful review of the race entry prepared by the Chief of Admin to confirm that all names and points are correct. Errors, if any, are corrected and any last minute changes are made. John and Judy, as expected, appear in alphabetical order among the 999ers at the end of their respective lists - at the **BACK OF THE PACK!**

The actual DRAW, once done by hand, is now generally done by computer. The computer takes the 15 lowest point holders (the **FIRST SEED**) and assigns them randomly to the first 15 start positions. The remaining racers, except for the 999ers, are assigned start positions 16 and up according to their points - lowest point holders to highest point holders. The computer then does another random draw for all 999ers and assigns them to the remaining start positions.

Coaches and officials then check both start lists and if everyone is satisfied, the **START LISTS** are approved and each racer is given a BIB number that corresponds with their position on the Start List.

THE RACE

Since this is a two run Slalom (SL), the race consist of two runs with the winner having the lowest combined times. Each run is on a different course. In many races, all racers ski the same courses with the girls racing first. Racers start in the order they appear on the first run Start List approved at the Draw.

The time each racer takes to complete the first run is recorded to the nearest 100th of a second. These times are normally posted on the scoreboard so that racers and coaches have that information. John and Judy complete their first run successfully.

After the first run has been completed, there is a break during which the racers warm up and eat lunch, the course for the second run is set and the Chief of Admin produces the second run start list or **BIBO**. This is again normally done on the computer.

Remember that the start order for the first run was based on the points of all entries with random assignment of numbers for the lowest 15 point holders and for 999ers at the end of the pack. However, the start order for the second run is based on the TIMES for the first run. Racers appear on the **START LIST FOR THE SECOND RUN** in order of their finish result for the first run - lowest time to highest time -

except for the first thirty who are listed in reverse order of finish on the first run. Thus the boy and girl with the fastest time on the first run start in 30th position on the second run and the boy and girl finishing 30th on the first run are the first to start the second run. The remaining racers are sorted according to their time in the first run – lowest through highest – and start in that order.

Judy was the 25th fastest girl in the first run and therefore starts 6th in the second run. John was 63rd and starts in that position for the second run.

THE RESULTS

Since this is a 2 run Slalom, the boy and girl with the lowest combined times are the winners and the ones with the highest combined times finish last.

Other results are possible: **DNS** - did not start; **DSQ** - disqualified; **DNF** - did not finish.

That is all one needs to know to give out the medals, but hold on because this is where the mystery of how we go from times to POINTS will become clear.

RACE POINTS

After listing the racers in order of finish, the computer calculates and assigns **RACE POINTS** to each racer.

Without getting into the mathematics of this calculation, it is enough to know that the RACE POINTS assigned to each racer are a function of the difference between the winner's total time and each racer's total time. The winner gets a value of 0.00 RACE POINTS. Racers whose total time is close to the winner get low RACE POINTS while slower racers get higher RACE POINTS.

John and Judy finish far behind the winner in their respective races and as a result get high race points. This is OK as it is their first race.

THE RACE PENALTY/PENALTY POINTS

While RACE POINTS describe each racers time in relation to that of the winner, the **RACE PENALTY** describes the results in terms of the calibre, based on NATIONAL POINTS, of the racers in the competition. This then allows the results of this race to be standardized with those of other races held across Canada.

Once again the computer is called upon to do the calculation of the RACE PENALTY that is based on the results of the top ten finishers and also the points of the best five starters in the race. That's all you need to know for now - trust us!

In any event, the **RACE PENALTY** or **PENALTY POINTS** are then added to the RACE POINTS for each finisher to yield a race result in terms of POINTS- **POINTS RESULT**. These are then sent to the **NATIONAL POINTS CHAIR** who uses them to calculate new NATIONAL POINTS for competitors whose POINTS RESULT is lower than their current NATIONAL POINTS.

Remember John and Judy and other racers are not only trying to win races but also to lower their POINTS.

THE NATIONAL POINTS LIST

On the NATIONAL POINTS LIST a racers POINTS for each discipline is the average of their **BEST TWO FINISHES** in terms of points results. John ended up with 500 points for this race while Judy received 580 points.

If they don't finish any more slalom races before the next NATIONAL POINTS LIST is published, their points on the list will be the average of 999 and the points they received in this race. .. 567.50 for John and 602.50 for Judy.

If they finished another slalom before the next list was published and received 525 and 540 points respectively, their NATIONAL POINTS would be 525 plus 500 divided by 2 = 512.50 for John and 580 plus 540 divided by 2 = 560.00 for Judy.

CLOSING THE LOOP

That is how POINTS are calculated and how racers try to reduce their NATIONAL POINTS in each discipline in which they race.

It can also be seen how a racer might complain that, in spite of a good finish (possibly even a medal) he or she got “**NO RESULT**”. This happens when his or her POINTS RESULT for a given race is higher than their NATIONAL POINTS for that discipline. Since averaging these results with their next best result would increase rather than decrease their NATIONAL POINTS, the National Points Chair will simply disregard the result. For the racer, this is a “NO RESULT” .. the race will not lower his or her NATIONAL POINTS in that discipline.

The incentive to **CHASE POINTS** should also be apparent. Chasing points is going out of the way to enter races where there are competitors having much lower points. The effect of the low point holders will be to reduce the penalty for the race. With a good result, even 15th or 20th, the combined effect of low penalty and low race points could give a points result which, after averaging, might significantly reduce one's NATIONAL POINTS.

Remember, lowering his or her NATIONAL POINTS could greatly improve their start position in subsequent races, raise their ranking relative to others in their age group, bring their points down enough to qualify for an “**ALL AREA PASS**”, meet selection criteria for a team or summer camps or qualify them for other forms of recognition.

GIVING AWAY POINTS involves low point holders entering races so that higher point holders can benefit from the reduced penalty but the low point holder will not benefit from the result.

POINTS FIXING, which is prohibited, is conducting the race or participating in the race in such a way as to artificially reduce the penalty.

CONCLUSION

RACE POINTS - RANK COMPETITORS IN A PARTICULAR EVENT.

NATIONAL POINTS - RANK COMPETITORS ACROSS CANADA FOR EACH DISCIPLINE, FOR ALL AGE GROUPS, FOR MALES AND FEMALES.

That's it... all you need to know (for now) about POINTS. Reviewing a race results package with your coach or official is a good idea).

John and Judy will be surprised and pleased when you ask about their points or whether a race had a good (low) penalty.

Now you can help introduce new racers and ski club members to the wonderful world of **POINTS!**

6 SKI CROSS

6.1 WHAT IS SKI CROSS?

Ski Cross has a basic concept: 'let's take this ski run and see who can get to the bottom of the slope first'. Perhaps the nature of ski cross comes from this simple game that all children on skis have played – 'first across the finish line wins'.

Ski Cross was created as the part of very early alpine ski competitions, which had the so-called 'mass starts'. The mass start was used, for example, in the one of the first races, the 'Inferno' in Mürren Switzerland, developed by a group of British skiers. Modern variations of the 'mass start' concept were first used in snowboarding and now in skiing since the late 1990's.

Freestyle Ski Cross is an event of the FIS Freestyle Ski Discipline, with Athletes using a combination of Freestyle and Alpine Skills competing head to head on a Snowboard Cross Course, all done with an attitude.

Typically, each race is now limited to either 4 or 6 starters with the top half of the field moving onto the next round. In ski cross, there are series of quarter-finals, semi-finals and then final rounds.

Not restricted by formal structures and formats, the ski cross event found a home in the FIS Freestyle discipline. The bulk of the competitors now come from the Alpine discipline and structures on the course have been modified from the Olympic Snowboard cross event.

The ski cross course is specially designed to test all of the skiers' skills, with different features including turns of different types and sizes, jumps of varying size, flat sections and traverses, along with rolls, banks and ridges which are constructed on a normal ski slope. Each Ski Cross course will be very different in layout. A Ski Cross course is very much influenced by the terrain and location it is built on, as well the design of the builder.

Physical endurance and strength is also a key factor, since the winning skier must ski between 4 and 5 runs of 60 seconds or more.

A Ski Cross athlete will always be challenged with change, racing each heat with different opponents, different lines, speeds and split second decisions that will never mirror the last run. Truly a test of multi tasking at high speed.

The International Freestyle Skiing Rules (ICR) defines Ski Cross as:

4500: Ski Cross

After a timed qualification run, a group of competitors' compete against each other on a specially prepared Ski Cross course that includes different types of turns, jumps, waves and other freestyle terrain features.

Race Format

There are 4 phases in a Ski Cross race. These phases can be run in one or two days.

- 1: Inspection Phase
- 2: Training Phase
- 3: Qualification Phase
- 4: Finals/Heats or Knock Out Round

Each phase is an integral part of the competition format. This format is structured to provide safe training, structured qualifications and fair Finals seeding.

6.2 OFFICIALS OBJECTIVES

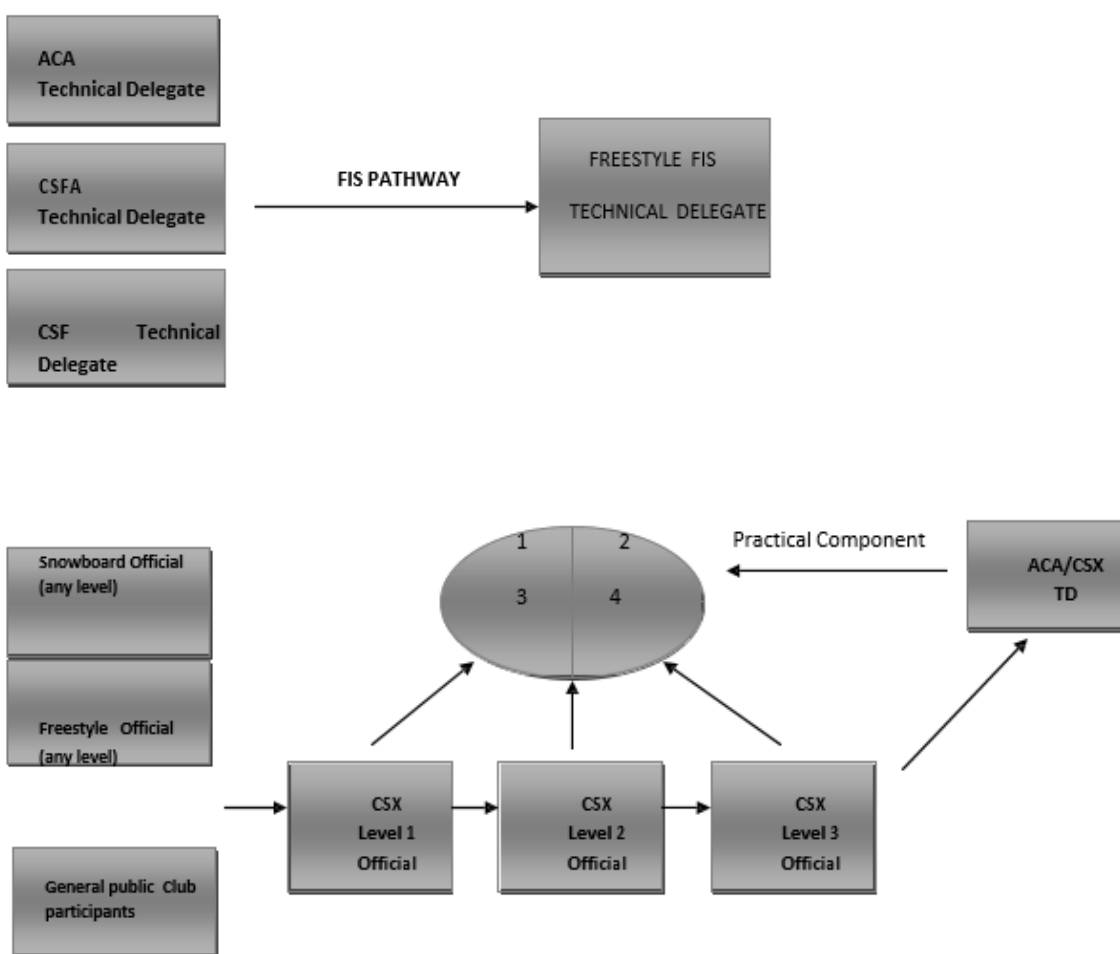
The objective of the CSX Level I Officials course is to ensure all participants have a clear understanding of Ski Cross as a sport, its format and how it is run as a race.

The level I Official will have an understanding of all the basic aspects of a Ski Cross race, Officials needed to run a race and a basic knowledge of Ski Cross rules and how they apply.

A clear understanding of all safety measures and protocol used in a Ski Cross venue will be a major section. Understanding venue safety is mandatory to run a safe event at all levels.

Ski Cross, being one of the newest Olympic sports is here to stay. Its future success will be based in part by participation of Officials and Volunteers. CSX/Alpine Canada Alpin wish to educate current and new Officials to ensure safe growth of Ski Cross events and programs in Canada.

6.3 OFFICIALS PATHWAY



6.4 OFFICIALS PROGRAM CERTIFICATION STANDARDS

Level 1

Ski Cross Level 1 is an entry level course designed to provide a basic introduction to Ski Cross. The information covered will give the official an understanding of the Sport, Race format and venue operations. A particular emphasis will be put on Safety and course control. This will include in-depth look at Gate Judging and Section Chiefs, defining their role on course and how it relates to safety and the overall event. Basic rules, the introduction of the Freestyle ICR and definition of all officials' roles will be covered.

Course Description

- Time required: 2-3 hours classroom, 2 hrs practical on hill
- Course Fee: TBD
- Pre-requisites: None
- Exam: Open discussion case studies

Level 2 pre-requisites:

Ski Cross Level 1 Officials course , Practical experience in 3 or more entry level or FIS level races , 3 different officials positions .Participation in Ski cross Training Camps may apply for Chief of Course, Start and section Chief positions.

Level 2

Ski cross Level 2 will cover a detailed understanding of event Flow and execution. An in-depth look at key Officials roles, responsibilities and expectations. Safety will be reviewed and updated from the Level 1 presentation with more technical explanations and descriptions. Study and discussion of the rules and rule book with a look at how the rules are applied by the officials using case studies as examples. Qualification timing and Explanation of finals Ladders and how they run. There will be an Introduction to course building and features.

Course Description

- Time required: 3-4 hours classroom, 2 hrs practical on hill if conducted around a Camp or event
- Course Fee: TBD
- Pre-requisites: Ski Cross Level 1 Officials course , Practical experience in 3 or more entry level or FIS level races , 3 different officials positions .Participation in Ski cross Training Camps may apply for Chief of Course, Start and section Chief positions
- Exam: Open book exam and group case studies

Level 3 pre-requisites:

Completion and Level 2 certification, Participate as an official at 4 FIS level events. Participating as a member of the Jury in 2 of those events (Referee or Chief of Competition). Participated in a different Chiefs (Leadership) role at each event.

Level 3

Ski Cross Level 3 will involve study, discussion and interactive sharing of Case Studies and Rules as they apply to competition scenarios. Continued review of Safety and updates. Detailed look and

the study of Key officials roles (the Jury) and the roles of the Technical Delegate. Course building theory and Maintenance. Race Administration, Timing and Tabulation.

Course Description

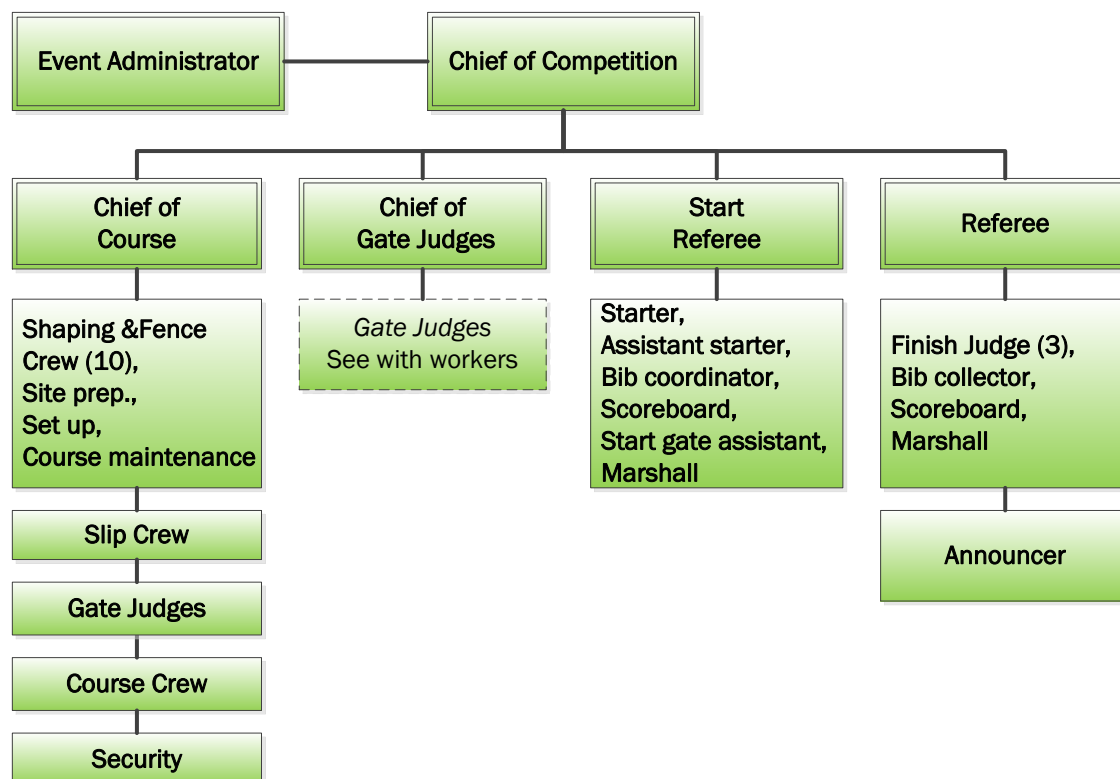
- Time required: 6 hours classroom, 2 hrs practical on hill if conducted around a Camp or event Should be broken into 2 days
- Course Fee: TBD
- Pre-requisites: Completion and Level 2 certification, Participate as an official at 4 FIS level events. Participating as a member of the Jury in 2 of those events (Referee and Chief of Competition). Participated in a different Chiefs (Leadership) role at each event. Must have participated as Chief of Gate Judges.
- Exam: Open book exam and group case studies

Level 4 / CSX Technical Delegate

Candidates for the Ski Cross Level 4 / CSX Technical Delegates designation must be nominated by the PSO or National Officials committee including other NSO's. (Canadian Freestyle Ski association, Canada Snowboard)

The nominee for level 4 /CSX Technical Delegate will have completed all levels of Ski Cross officials training and participated in all officials positions at a national level

6.5 RACE ORGANIZING COMMITTEE



6.6 BASIC EVENT DAY BREAKDOWN AND RACE SCHEDULE



PROGRAM FOR
PROGRAMME POUR
PROGRAMM FÜR

PGS ☐ PSL ☐ SBX ☐

Date: Date: Datum:	Site: Lieu: Ort:	Nation: Nation: Nation:	Disc.: Disc.: Disz.:
Lift open/Ouverture des remontées mécaniques/Lift öffnet:			
Jury inspection/Inspection du jury/Besichtigung Jury:			
Warm-up and training area/Piste d'échauffement et d'entraînement/Aufwärm- und Trainingspiste:			
Course setter at start/Traceur au départ/Kurssetzer am Start Name and Nation/Nome et Nation/Name und Nation			
QUALIFICATION			
Inspection/Reconnaissance/Besichtigung: closed at the start/ fermée on start/am Start geschlossen:			
Training time/ Temps Entraînement / Trainingszeit			
Coaches and Photographers on place/Entraîneurs et Photographes en position/Trainer und Fotografen am Platz:			
Entry for all closed/Entrée fermée pour tous/ Zutritt für alle geschlossen:			
Forerunners Start time/Ouvreurs Heure de départ/ Startzeit Vorläufer:		(Number 4)	
Start time/Heure de départ/Startzeit :		Women : Men :	
Start interval/Intervalle de départ/Startintervall:			
FINALS			
Inspection/Reconnaissance/Besichtigung: closed at the start/ fermée on start/am Start geschlossen:			
Coaches and Photographers on place/Entraîneurs et Photographes en position/Trainer und Fotografen am Platz:			
Entry for all closed/Entrée fermée pour tous/ Zutritt für alle geschlossen:			
Forerunners Start time/Ouvreurs Heure de départ/ Startzeit Vorläufer:		(Number 4 – 2 pairs)	
Start time/Heure de départ/Startzeit :			
Start interval/Intervalle de départ/Startintervall:			
GENERAL			
Connection Coach / Entraîneur liaison / Verbindungs Trainer		Name	Nation
Slip crews/Lisseurs/Rutschkommandos:		As needed	
Prize giving ceremony/Remise des prix/Siegerehrung:			
Press conference/Conference de presse/Pressekonferenz:		None	
Next team captains meeting/Prochaine séance des chefs d'équipes/Nächste Mannschaftsführersitzung:			
Miscellaneous/Divers/Verschiedenes: - All Teamcaptains confirm all athletes have signed the FIS athletes declaration - - -			

programm alpin.doc/05.11.10



SKI CROSS

FIS Nakiska Ski Cross

Alpine Canada Alpin /Ski Cross Officials level 1 Course

December 1-2 2011

Tentative schedule Officials and Race Event

Thursday Dec 1, 2011

- 8:00 – 8:30 am Team Captains Meeting (Location TBA)
- 8:30 - 11:30 am Officials Classroom Training, Upstairs Main lodge
- 11:30 - 12:00 Lunch
- 12:00 – 12:30 Proceed to SX Course (Athlete Inspection)
- 12:30 – 1:30 SX Athlete Training
- 2:00- 3:00 SX Qualifying Runs
- 3:30 Officials Meeting in Main Lodge (Race review/positions for Friday)

Friday Dec 2, 2011

- 8:00 am Officials Meeting main Lodge (First lift to course immediately following)
- 9:00- 9:15 SX Athlete Inspection
- 9:30 – 10:30 SX Athlete Training
- 10:45 SX Finals

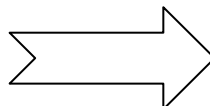
Awards 30 min after tear down of course.

This is a tentative schedule and is subject to approval of the Venue and Chief of Race.

6.7 ROLES AND RESPONSIBILITIES, KEY OFFICIALS

6.7.1 MAJOR SKI CROSS OFFICIALS

- ☐ Technical Delegate
- ☐ Chief of Race (Competition)
- ☐ Referee



JURY MEMBERS

- ☐ Chief of Course
- ☐ Chief of Start
- ☐ Chief of Finish
- ☐ Chief of Gate Judges
- ☐ Chief of Timing
- ☐ Course Builder
- ☐ Connection Coach/Course setter

6.7.2 MINOR SKI CROSS OFFICIALS

- ☐ Starter
- ☐ Assistant Starter
- ☐ Bib Coordinator
- ☐ Gate Judges
- ☐ Finish Judges
- ☐ Hand Timers
- ☐ Finish Timers/ Timing Crew
- ☐ Medical Services Coordinator/Patrol

Depending on the level of the Ski Cross event, all the officials on the list may not have to be present. For example; course builder or medical services coordinator

6.7.2 BASIC ROLE AND RESPONSIBILITIES OF THE OFFICIALS

TECHNICAL DELEGATE

- ☐ Assigned by NSA or FIS
- ☐ Responsible for applying rules of the governing organization, supervises work by competition officials, inspecting Ski Cross safety procedures and installations
- ☐ Chairman of the Race Jury

CHIEF OF RACE

- ☐ Assigned by the Organizing Committee
- ☐ Responsible for overall race operations, liaison with the host resort
- ☐ Manages work of competition officials
- ☐ Member of the Race Jury

REFEREE

- ☐ Assigned by FIS, NSA, TD or Club (depending the level of competition)
- ☐ Assists the Technical Delegate
- ☐ Records reports from the Chief of Gate Judges about any rule infractions or gate faults
- ☐ Records results of heats provided by finish judges
- ☐ Provides results information data/timing group, signs official results and post results to notice board
- ☐ Member of Race Jury

CHIEF OF COURSE

- ☐ Assigned by Organizing Committee
- ☐ Responsible for maintaining the Ski Cross course, including the start area, installing timing system and managing course workers
- ☐ Sets the race course (i.e. gate panels) in consultation with the Course Setter/Connection Coach.

START REFEREE (Chief of Start)

- ☐ Responsible for managing the start area and start procedures including directing the work of the Starter and Assistant Starter

CHIEF OF FINISH (Works closely with the referee)

- ☐ Responsible for managing the finish area and directing the work of the Finish Judges

CHIEF OF GATE JUDGES

- ☐ Responsible for directing the work of the Gate Judges and conveying necessary information to the Referee

CHIEF OF TIMING

- ☐ Responsible for directing the work of the Hand Timers and Time Keepers for the electronic timing system
- ☐ Responsible for setup and insuring the electronic timing systems are operating correctly
- ☐ Responsible for communicating with the Starter regarding operations of the timing system , starts and course holds
- ☐ To provide an accurate and detailed timing report to the TD

CONNECTION COACH/COURSE SETTER

- ☐ Assigned at the Team Captains meeting
- ☐ Responsible for setting the course gates prior to training and competition on the Ski Cross course
- ☐ Liaison between all coaches and the Organizing Committee

COURSE BUILDER

- ☐ Assigned by the Organizing Committee
- ☐ Responsible for designing or redesigning the layout of the course in conjunction with the host venue
- ☐ Directing the construction and testing of the course (often operates the snow cat during construction)

STARTER

- ☐ Responsible for the warning signals and start command
- ☐ Start recording
- ☐ Assign duties to Assistant Starter as needed

ASSISTANT STARTER

- ☐ Responsible for calling competitors according to the start order
- ☐ Also checking competitors bibs, clothing and equipment for violations before they enter the start area

GATE JUDGES

- ☐ To observe and report accurately whether the passage of the competitor was correct through their assigned area of observation
- ☐ To observe and report accurately infractions to the rules governing DSQ and contact
- ☐ May be responsible for course clear in their assigned area of observation

FINISH JUDGES

- ☐ Responsible for determining the finish order of the competitors
- ☐ To assist the Jury with DNF and DSQ rulings if necessary

BIB COORDINATOR

- ☐ Responsible for preparation, assignment, distribution and collection of all bibs provided to competitors and other officials
- ☐ Keeps track of which athletes are assigned which colour bib during heats
- ☐ Works closely with the Assistant Starter

BIB COLLECTOR

- ☐ To collect numbered bibs from competitors as they leave the finish area following the qualification run.
- ☐ To collect coloured bibs from competitors at the end of each heat and coordinate their return to the start

MEDICAL SERVICES COODINATOR/PRO PATROL

- ☐ Responsible for organizing adequate first aid and medical coverage during training periods and the actual competition
(Lower level events may have medical covered by mountain Patrol services coordinated by the organizing committee, approved by the Technical Delegate)

Other minor positions that we may find at an event would include Hand Timers, Section Chiefs and course work crew. All these positions report to the appropriate Chief official

6.8 SKI CROSS TRACK



a. Start Area

- Width min 30 m (just over start gate size)
- Large and flat enough to accommodate competitors and team staff

b. Start Section

- Minimum 60m before the first direction change
- Start straight must be wider than the start gate
- Start gate must be square to the first feature (equal distance from left/right gates)
- First direction change should be made once the field is reasonably split up, therefore technical features should be used in the starting section
- Start feature options / recommendations
 - Regular down ramp
 - Roller pack
 - Wu-tang
 - Step-up
 - Step-down
 - Waterfall
 - Gap to ramp
 - Ice cube style feature(step up-flat-step down or wu-tang-flat-step down)
 - Quarter Pipe drop in

Ski Cross Safety Net and Installations

Insure all spill zones and dangerous areas are netted correctly according to the manufactures instructions of the product used.

B-net is best used in all cases. All Banked corners must be lined with B-net on the top from entrance to exit. Place net at least 50cm back from the edge of the bank, slightly angled inwards toward the race lane. B-net on berms must be pulled tight. Use Crash padding for additional protection where

applicable. Further information on courses, features and explanations can be found at www.fis-ski.com



6.9 BASIC RULES INSIDE THE FIELD OF PLAY

The International Freestyle Skiing Rules (ICR) [4500] defines Ski Cross as:

After a timed qualification run, a group of competitors' compete against each other on a specially prepared Ski Cross course that includes different types of turns, jumps, waves and other freestyle terrain features.

This is a race event that combines Giant slalom and motocross characteristics set on moderately long, preferably undulating and hilly with a vertical drop between 250 to 450 m.

The ski cross course is specially designed to test all of the skiers' skills, with different features including turns of different types and sizes, jumps of varying size, flat sections and traverses, along with rolls, banks and ridges which are constructed on a normal ski slope. Long, medium and short turns are set to ensure speeds are faster than Slalom and well below SG or DH.

Each Ski Cross course will be very different in layout. A Ski Cross course is very much influenced by the terrain it is built on as well the builder's imagination.

The gates in Ski Cross are double-pole gates with smaller flags and alternating colors between 2 colours (not necessarily blue and red only). The inside turning gate is a small stubby gate. The outside gate is a taller non-hinged gate.

Race Format

There are 4 phases in a Ski Cross race. These phases can be run in one or two days.

1. 1: Inspection Phase
2. 2: Training Phase
3. 3: Qualification Phase
4. 4: Finals/Heats or Knock Out Round

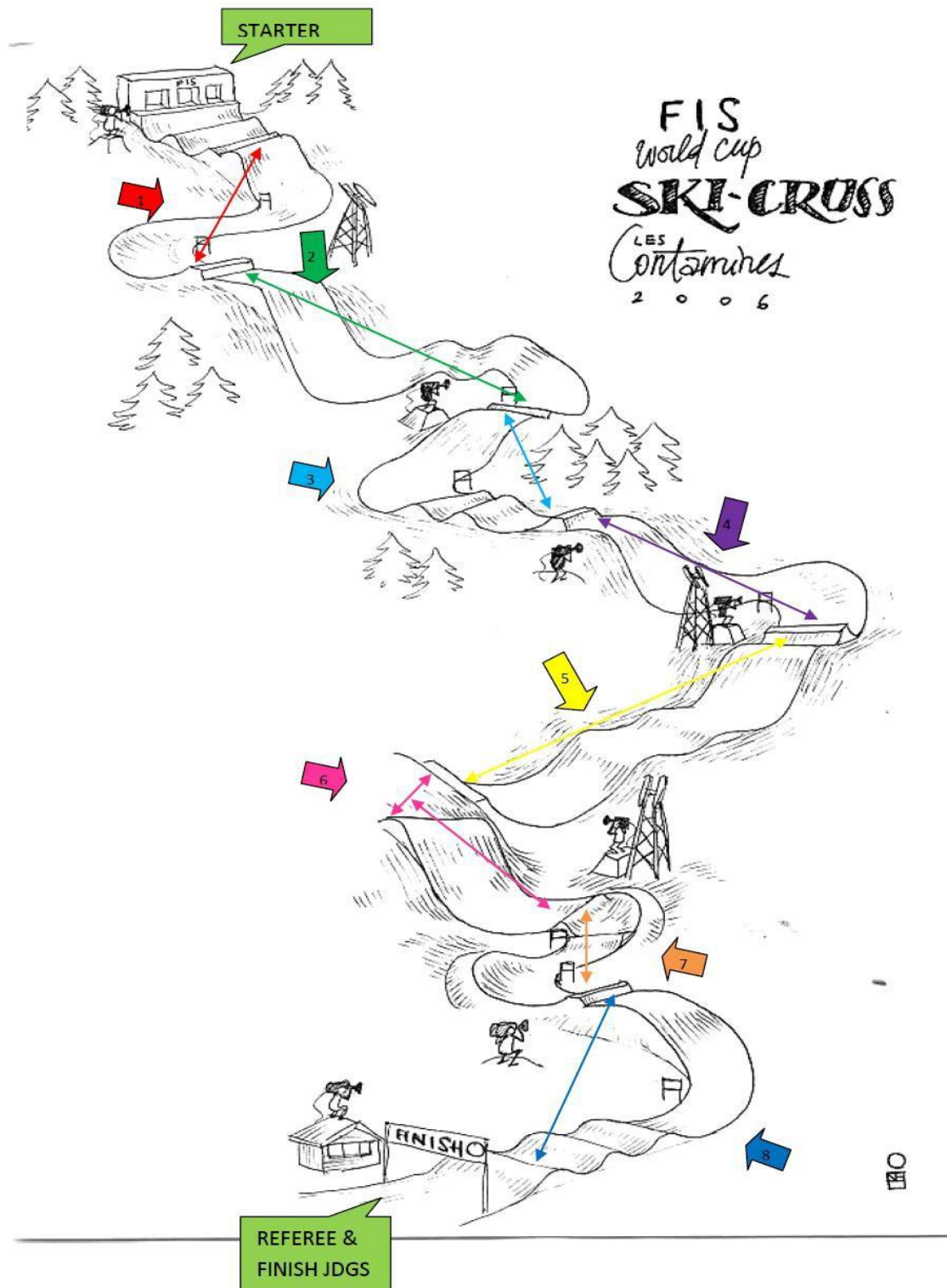
Each phase is an integral part of the competition format. This format is structured to provide safe training, structured qualifications and fair Finals seeding.

Figure 17 – Illustrates a Ski Cross course layout.

- Average grade of the slope should be 5° to 12°
- Minimum Width 30 m (for very short sections)
- Finish area 30 m min. width, 60 m Min. depth
- Average speed of approx. 15-16 m per sec (GS speeds)
- Control speeds with turns and gate setting.
- Features should be age and ability appropriate e.g. splines, banks and rollers only, no air and one-at-a-time for level I and level II / U16 and younger



GATE JUDGE AND SECTION CHIEF PLACEMENT



The International freestyle Skiing Competition Rules (ICR) Section 6 or the 4500 section of the Freestyle skiing ICR lists Ski Cross specific rules. The most notable rules to observe on course are:

Correct Passage for Ski Cross

4501.2.5 Correct Passage across the Gate Line

A gate has been passed correctly when both of the competitor's ski tips and both feet have passed across the gate line. If a competitor loses a ski, without committing a fault, e.g. not straddling the gate, then the tip of the remaining ski and both feet must have passed the gate line. Whenever 2 gates are required to be set the gate line is the imaginary shortest line between the 2 turning poles. (See ICR Alpine 661.4). Wherever a turning gate only is required to be set, the gate line is the extension of the line from the outside pole of the gate to the gate to the turning pole which lies past the turning pole and extends into the course.



NOTES:

4505.6.2 Ranking of competitors that Do Not Finish (DNF)

In the case where more than one competitor does not complete the course nor cross the finish line, the rankings in that heat will be based on the location where the competitor(s) have completed the course. The competitor that has made it further down the course will receive the higher ranking.

4508.1 Definition of contact and Blocking

Intentional contact by pushing, pulling or holding another competitor's arm, leg or pole or other means, which causes another competitor to slow down, fall or exit the course is not allowed and is an automatic disqualification. A competitor is not allowed to bring their arm, leg or ski pole in front of other competitor's body to avoid being passed. Blocking, by intentional movements of the body or leaving the natural skiing line is not allowed. The

“natural skiing line” is defined as the fastest way between the features and around the gate line. All contact infractions will be at the discretion of the Gate Judges and the Jury.

3056.7 Disqualifications (DSQ)

If a competitor alters course or jump or trains on a closed course or does not stop, when flagged in Ski Cross.

Gates and Poles

A Ski Cross gate consists of a triangular gate panel attached to one non-breakaway non-hinged, static or fixed base, outside pole and on the inside or turning side a hinged, or breakaway, 45 cm long rubber stubby pole (turning pole).

Triangular gates must be used in Ski Cross. The size of the gate is: Base Long side Short side 130cm 110cm 40cm. The turning pole must be a rubber stubby pole (45 cm long).



6.10 EVENT DAY ROLES AND RESPONSIBILITIES

Daily Duties

- ☐ Race Format and start of day
- ☐ Course Inspection
- ☐ Training
- ☐ Time Trials / Qualifications
- ☐ Finals or Heats format
- ☐ Finals on course
- ☐ Finals at the finish Line

6.11 BASIC MATERIALS FOR GATE JUDGES AND SECTION CHIEFS

Gate Judge Card

- ☐ How to fill out and when
- ☐ Remember, Report, Record, Review
- ☐ Listen for CONFIRMATION from Referee or TD

Heat Sheet

- ☐ What is a heat sheet and why is it used?
- ☐ Track DSQ
- ☐ In the case of 2 competitors not finishing it helps confirm ranking of those competitors.
- ☐ Pros and cons

Course Placement

- ☐ Line of sight
- ☐ Understand your section and its flow
- ☐ Identify challenges and advise appropriate Official

Responsibilities in your section

- ☐ Monitor the safety of everyone in your section, having a 360 degree awareness of what is happening in your section is imperative as a Section Chief or Gate Judge.
- ☐ Constantly monitor all radio communications; they all pertain to you and the safety of others. Your radio will tell the story of what is happening and keep you aware of the execution time of the event as it runs throughout the day.
- ☐ Working together and communicate with everyone in your section
Course crew, Media, Coaches etc.

INSTRUCTIONS FOR THE GATE JUDGES

1. Upon arriving at your assigned gate(s), remove your skis/board and place on the snow parallel to the course fencing and away from any spill zone.
2. Stand where you can best see all your gates while maintaining a position of maximum safety. You may be assisted in this task by your Chief of Competition, Chief of GJ or the Technical Delegate.
3. Fill out the front of the card and then immediately draw a picture of your assigned gates in each of the four boxes. Draw the ⊗ symbol to indicate your position. Mark all blue gates with a diamond ♦ symbol and all green gates with a circle ○ symbol
4. Mark only faults (missed gates and intentional contact) and note the racer's number (or bib color for heats) in the box.
 - a. Draw a detailed diagram of the fault committed on the predrawn gate picture.
 - b. Be prepared to explain the faults.
 - c. Do not discuss the incident except with the Chief of GJ or Jury.
 - d. GJ decision must be clear and unbiased. Declare an incident only when convinced that one has been committed.
5. If a competitor leaves the course and returns to the course without missing the gate, the GJ shall inform the Chief of GJ by radio that the competitor has returned to the course.
6. Record on the card the circumstances of any interference with a racer's run.
7. If necessary, replace any gate poles to the exact spot marked in the snow with dye, replace the gate flags and maintain course conditions until assistance from the Race Crew arrives.
8. Remain in place until notified by the Chief of GJ. Please remit your card to the chief of GJ after completion of the competition.



ALPINE CANADA

Gate Judge Card

DSQ /Fault :

Yes : ○

No : ○

Race : _____

Date : _____

Men ○ Women ○ Run # _____

SX ○ SBX ○ Qualification ○ Heats ○

Gate Numbers : _____

Name : _____

Signature : _____

Cell : _____

BIB # or COLOUR	GATE Number

BIB # or COLOUR	GATE Number

Notes

Diagram

♦ - BLUE

○ - GREEN

⊗ - Your position

SX

GATE JUDGE HEAT CARD

GATE JUDGE: _____ GATE #(S): _____

HEAT	RED	GREEN	BLUE	YELLOW
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				

AS SKIERS SUCCESSFULLY PASS YOUR GATE(S), CHECK OFF. OTHERWISE
NOTE INCIDENT ON 'GATE JUDGE CARD' AND NOTE THE INFRACTION ABOVE.

6.12 RADIO PROTOCOL ON SKI CROSS COURSE

Radio protocol is the integral link to running a safe Ski Cross event at any level. Ski Cross is a very dynamic and fast sport with a training format that is similar to a busy highway. Unlike other skiing disciplines Ski Cross training allows multiples of athletes on the course at the same time. Even though these athletes are safely spaced at the start there is opportunity for overtakes and collision if an incident was to occur on course.

A clear line of radio communication on several levels is important. It is optimum to use radios that have 5 channels programmed. At a minimum 2 channels will work safely.

Here is an example of a 5 channel communication and each official linked on each channel.

CHANNEL 1- RACE OR COMPETITION CHANNEL

- ☐ Starter
- ☐ Chief of Gate Judges
- ☐ Gate Judges
- ☐ Chief of course
- ☐ Start Referee
- ☐ Finish Referee/Chief of Finish
- ☐ JURY- TD, Chief of Race, Referee (channels 1 and 3)
- ☐ Race Director (WC)

CHANNEL 2- SCORING AND TIMING CHANNEL

- ☐ Referee
- ☐ Finish Referee
- ☐ Finish Judges (can also communicate via Finish Referee)
- ☐ Timing and data
- ☐ Notice Boards

CHANNEL 3-JURY

- ☐ Technical Delegate
- ☐ Referee
- ☐ Chief of Race
- ☐ Race Director (WC)

CHANNEL 4- MEDICAL

- ☐ Technical Delegate
- ☐ Chief of Medical
- ☐ Event Doctors
- ☐ EMS Personal
- ☐ Patrol

(Lower level events will use Patrol or Mountain Ops radios linked to the TD or Chief of Race)

CHANNEL 5- TECHNICAL OPERATIONS

- ☐ Chief of Race
- ☐ Chief of Course
- ☐ Chief of Course Maintenance
- ☐ Course Builder
- ☐ Course Workers

(This is used at WC, OWG level events)

TIMING COMMUNICATIONS

- ☐ Hard-line communication with headsets between the Start and Finish is standard with most timing systems. The starter should also have radio communication on the race channel during qualifications for safety reasons.
- ☐ It is recommended if a headset is used in the start that only one ear is used to allow the starter to hear other communications from the assistant or separate radio.

6.13 STOP START! MOST IMPORTANT COMMUNICATION ON COURSE

The radio command 'STOP START' is used to communicate the immediate need to close the start and stop any further athletes from entering the course.

When the starter hears this command he will close the start and reply on the radio 'START IS STOPPED'.

In Ski Cross, this command is used by Gate Judges and or other officials to stop all movement on course in the case of an accident or something on course that may put athletes at risk.

Each Gate Judge/Section Chief on a Ski Cross course is assigned a section or area of the course that he/she will be responsible for. This command is used to stop athletes from entering that section of the course. This command will queue each other section to wave a safety flag and stop athletes from proceeding down the course, thus stopping all movement on course until it is safe to resume the race or training.

Each section is numbered and assigned to an official. For example the course will be numbered from the start to the finish.

Start, Section 1, Section 2, Section 3, Section 4, ..., Finish.

Let's say a Racer falls during training in section 4 and is impeding the race lane or has an injury. The Gate Judge or section chief needs to immediately do the following in the listed order so it is clearly understood.

- 1: Call - STOP START
- 2: Identify section - SECTION 4
- 3: Reason- SKIER DOWN

This will indicate to the Start and sections 1, 2 and 3 that there is immediate danger in section 4 and they must stop all athletes from proceeding. (using the flag)

At this point the TD or another assigned official will call that section to assess the problem. Each section below section 4 will allow the athletes in their sections to proceed.

This protocol is essential to running a safe event.

Once the course has been stopped and the situation that caused the stop start has been solved the Starter must call for a course clear for the bottom (finish) up. This will clear the race course so training or racing can continue.

1. **Starter:** Can I have a course clear from the bottom up starting with the Finish please!
2. **Finish Referee:** The finish is clear
3. **Gate Judge 5:** Section 5 is clear
4. Etc. until it reaches the start.

The Starter can resume competition or training at that point.

7 PARA ALPINE

7.1 INTRODUCTION TO PARA ALPINE EVENTS

INTERNATIONAL FEDERATION

The International Paralympic Committee (IPC) is the international governing body for para-alpine skiing. Its headquarters are in Bonn, Germany. It is the parent body of para-alpine ski racing world wide of which Canada and the Canadian Paralympic Committee, are one of it's members.

The IPC annually publishes the Alpine Skiing Rules and Regulations under which all sanctioned races are run, and administers the international para-alpine ski racing program including World Cup, World Championships and Paralympic events.

7.2 WHAT IS PARA ALPINE?

Para-alpine skiing has three main classification categories: visually impaired, standing and sitting. Male and female athletes with a physical disability such as a spinal-cord injury, cerebral palsy, amputation and visual impairment compete within these categories. A complete listing of the classifications in detail can be found online at <http://www.paralympic.org/alpine-skiing/classification>.

To compete at IPCAS Events an athlete must be IPCAS classified. Until an athlete has been IPCAS classified, he/she will be designated N status (New), and can only compete in IPC Alpine Skiing competition levels: 2, 3, 4, 5, 6.

An athlete with N Status must compete in the highest class of his/her category (*)

(*) VI athletes will race as B3

All athletes racing in IPCAS sanctioned events are required to have valid IPCAS license to compete. These can be purchased through the PSO's, and include necessary insurance. All IPCAS licensed athletes have IPCAS points, which are unique to IPCAS races, but operate the same as FIS points.

Courses are set to match the terrain, as they are for alpine races. Big jumps and compressions must be avoided. The mechanics of sit skis, and affected lower limbs do not necessarily permit athletes to recover from a fully loaded position as one may expect, and therefore double bumps must be avoided.

FIS TDs are assigned to all IPCAS races by the appropriate FIS Commissioner.

7.2.1 PARA ALPINE CATEGORIES

Visually impaired

No physical contact between the guide and competitor is allowed during the race. The distance between guide and competitor must be less than three (3) gates for SL and two (2) gates for GS, SG and DH, excluding delay gates and vertical combinations. All competitors in the completely blind class (B1) must wear approved blacked-out goggles during the competition. In all visually impaired classes, a guide is mandatory; the competitor and the guide are a team. Blind skiers are directed down the course by guides skiing in front using only voice signals or radio communication.

B1 - Totally blind (no sight)

B2 - Partially sighted (visual acuity of 20/60 - limited sight)

B3 - Partially sighted (visual acuity above 20/60 to 6/60 - more sight than B2)

Standing

Athletes in certain standing classifications (example, single-leg amputees who ski without a prosthesis and sit-ski users) use special poles called outriggers. Outriggers have short ski blades/tips on the end and help the skier with balance and pushing.

LW1 - double above-knee amputees, or impairments that cause similar loss of limbs

LW2 – single above or below knee amputation, or impairments that cause a similar loss of limb

LW3 –double below-knee amputees, or impairments that cause a similar loss of limbs

LW4 - single below knee amputation, or impairments that cause a similar loss of limb

LW5/7 single above/below elbow amputation, or impairments that cause a similar loss of limb; ski pole use limited

LW6/8 - double above or below elbow amputation, or impairments that cause a similar loss of limb

LW9 – equivalent activity limitation of amputation in both upper and lower limbs

Sitting

Some athletes with a physical disability compete from a sitting position using a sit-ski, also called a mono-ski. As the name suggests, mono-skis have a specially fitted chair over a single ski. The chair includes seat belts and other strapping, as well as a suspension device to minimize wear and tear on the skier's body.

LW10 - mono skiers (high degree of paraplegia, no muscles in lower body)

LW11 - mono skiers (lower degree of paraplegia, with muscles in lower body)

LW12 - mono skiers (lower degree of paraplegia, lower incomplete paralysis)

7.3 AGE CATEGORIES

IPCAS Competition Year	2015/16	2016/17	2017/18
Minimum Age (Level 3 and 4)	2002	2003	2004
Minimum Age (Level 0,1,and 2)	2000	2001	2002
Minimum Age Speed Events	1999	2000	2001

7.4 HOMOLOGATIONS

Generally speaking, para-alpine events for both men and women are run in conformity with FIS women's technical specs. There are some slight differences, as in the case of DH. See IPCAS Rule 1500 for complete specifications.

7.5 TIMING

1. IPC Software is the official software that is used to calculate and produce all results, which embeds the factor list automatically. Timing procedures are as per FIS Timing Booklet Alpine Skiing.
2. Factor List: the IPC produces an annual document that lists the factors for each classification and each discipline. Factors are the time adjustments applied to running times based on athlete's affective classifications.
 - a. Factors are not meant to level the playing field within an alpine ski racing competition, but rather level the playing field for all competitors within an IPCAS competition.
3. Only factored times are to be displayed/published.
4. Don't bury communication/timing wires in the snow by the start gate. They can be severed the sharp tips of outrigger's when pushing off from the start!
5. **TIMERS** have to be aware that both the guide and the visually impaired athlete will cross the finish line and set their timing equipment so the finish pulse of the athlete is distinguishable from the finish pulse of the guide.
6. Separate race penalties are calculated for men and women.
7. Race points and penalties are calculated in the same manner as for alpine races.
8. All guides must guide VI competitors from the front. An exception can occur only between the last gate and the finish line, where the competitor can overtake the guide (rule 1303.1).
9. Don't bury communication/timing wires in the snow by the start gate. They can be severed with the sharp tips of outrigger's when pushing off from the start!
10. All race results and other race documents can be found on the IPC Alpine Skiing website – <http://www.paralympic.org/alpine-skiing>

7.6 START AREA

Detailed information on the start area and can be found in the IPCAS Start Area Instruction Manual, on the the Rules & Regulations page - <http://www.paralympic.org/alpine-skiing/rules-and-regulations>.

1. Athletes must be able to slide into the start area from above. Athletes in sit-skis cannot hike.
2. The start has to be 80 cm wide to accommodate sit skis, and the wand has to be adjustable from a height of 40 cm for standing skiers to a height of 80 cm for sitting skiers.
3. The start ramp must also provide space on either side of the start posts for a visually impaired athlete's guide. (See diagram in IPCAS Start Area Instruction Manual)
4. The start order for all events is visually impaired, standing, then sitting.

Visually impaired athletes are permitted to inspect 10 minutes prior to other competitors (Rule 1302.7)

7.7 FIELD OF PLAY

- 27 mm gates are required for SL.
- The IPCAS Race Director is the authority representing IPC Alpine Skiing at all World Cup, WCH and Paralympic Games alpine skiing events. The IPCAS Race Director may represent the sport at lower level events, such as Continental Cup races, but this will be determined on a case-by-case basis, with direction from IPC Alpine Skiing. A complete listing of duties, rights and responsibilities are listed in the Rules and Regulations 400.2.1.
- Do not try to stop a sliding sit skier! They weigh a lot and carry a lot of momentum, and will hurt you. Let the safety netting do its job.
- Public address systems, snow machines or other noise must be kept to a minimum at the start, finish and on the entire race course for all visually impaired competitors (rule 1304).

7.8 GATE JUDGES

- If an athlete falls, the gate judge cannot help them until the athlete asks for or requires assistance; in such case, the athlete is disqualified and out of the race.
- Visually impaired athletes and their guide must both complete the course successfully with correct gate passage. Both guide and athlete get the same result and award for their finish.
- The distance between guide and competitor must be less than three (3) gates for SL and two (2) gates for GS, SG and DH, excluding delay gates and vertical combinations. Failure to comply will lead to disqualification (rule 1303.2).
- Guides must ski in front of the competitor. Physical contact between the guide and competitor during the race will lead to disqualification (rule 1302.5).
- Outriggers used by sit skiers and standing skiers are treated, by gate judges, as ski poles.
- Where there is no outside pole, as in single pole slalom, both feet and ski tips (if present, otherwise only one will apply) must have passed the turning pole on the same side, following the normal race line of the slalom crossing the imaginary line from turning pole to turning pole. If a competitor loses a ski, without committing a fault, e.g. not by straddling a pole, then the tip of the remaining ski and both feet must meet both requirements. If the competitor has not correctly crossed the imaginary line from turning pole to turning pole and does not follow the normal race line, then the competitor must climb back up and pass around the missed turning pole. (rule 801.3.4)

7.9 Integration of Para-Alpine Athletes and Races

There are various ways in which para-alpine and alpine training and racing programs can be integrated, depending on the level and desired goals/outcome of the races.

There are a few types of integration between alpine and para-alpine races:

- Para-alpine athletes that do have National or FIS Competition Cards can enter National or FIS points races as their fellow competitors do. These para athletes are competing against alpine athletes and are timed and scored the same way. IPC Factors are never used in races which are scored for National or FIS Points.
- An IPCAS race can be held within in a National or FIS competition. Each race would be scored separately (and require the proper codex's/race notice), but would use the same course, ROC etc. to help maximize effectiveness of small numbers. If there are only a few para-alpine athletes within a race, they may start between the forerunners and the first seed. (this makes life easier for timers)
- In training and club races which are not being scored for points (National/FIS/IPC) para-athletes can train or race alpine athletes using IPC Factors (calculated times) in an attempt to level the playing field. When this is done, however, the participants, coaches and others need to know and understand that the IPC Factors (calculated times) were not designed for this purpose and it is not supported by IPC or ACA as a means to level the playing field between alpine and para-alpine athletes.

There are many different ways integration can be achieved with significant economies of scale to be realized by race Clubs, PSO's and ACA, and unlimited opportunities for para and alpine athletes to train, race and benefit from the energy, effort and inspiration that all the athletes bring to training, race and social events.

NOTE: While an attempt has been made to outline key aspects of para-alpine races, it is important to consult the rules and precisions to be sure you have the most current information.